Colleges and the Educational Spectrum

Colleges and Universities

Background Papers

VISION 2000

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Vision 2000
A Review of the Mandate of the Colleges of Applied Arts and Technology

VISION 2000

October 1989

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Vision 2000 is a review of the mandate of Ontario's Colleges of Applied Arts and Technology. It is coordinated by the Ontario Council of Regents and was initiated by the Minister of Colleges and Universities in October of 1988.

A Steering Committee, with broad-based representation, was established to guide the Vision 2000 process. Consultation, with a wide variety of stakeholders, and research was handled by five study teams. Study Team 1's task was to provide an empirical snapshot of the current college system and its external environment. Researchers from Study Team 2 examined the role of colleges in our changing economy, while Study Team 3 looked into ways that the college system could promote access and educational support for diverse learners. Study Team 4's purpose was to study the challenging interrelationships of quality, accessibility and efficiency. For Study Team 5 the research and consultation focussed on the linkages between colleges and other educational institutions.

The background papers in this volume are part of a number of publications prepared by researchers for Vision 2000. These papers do not necessarily represent the views of the Study Teams, the Vision 2000 Steering Committee, or the Ontario Council of Regents.

Together the background papers are meant to provide a broad base of ideas as part of the input for the deliberations of the study teams and the Steering Committee.

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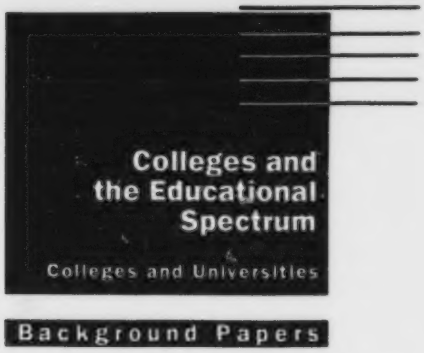

Background Papers

Peter Stokes

**College Transfer Revisited:
A Working Paper**

Robert Alexander Marshall

**College-University Transfer Arrangements Existing in Ontario:
(Questionnaire Results)**

John Dennison

**College to University—
An Analysis of Transfer Credit Policy and Practice**

Michael Skolnik

**How Ontario's Colleges Might Respond to Pressures
for the Provision of More Advanced Training**

Stuart Smith

**Skilled and Educated: A Solution to Ontario's
Urgent Need for More Polytechnic Programs**

Craig McFadyen

**Consultations on
College-University Linkages**

October 1989

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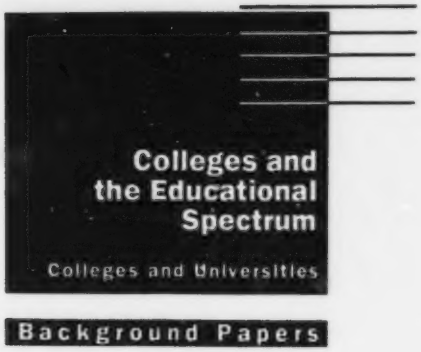

Background Papers

Peter Stokes

College Transfer Revisited: A Working Paper

Study Team 5

Our present education system is an archipelago, with universities constituting one island, high schools another, primary and elementary schools another, and community colleges yet another. The ferry service between these islands is infrequent and unpredictable. What we shall need for the 21st century...is a series of fixed links between the islands in order to mobilize and coordinate all of our considerable educational resources in the interest of the people and the society we serve...

James Downey
President
University of New Brunswick

College Transfer Revisited:
A Working Paper

Summary:

This paper is one of a series of working studies prepared to facilitate discussion within "Vision 2000", a collaborative effort to review the mandate, role and future directions of Ontario's colleges of applied arts and technology. Study team 5 focuses on the subject of "colleges and the educational spectrum", and is concerned specifically with articulation and linkages between the colleges and secondary schools, and between colleges and universities. The present paper considers both historical and existing arrangements in Ontario for transfer between a college program and a university program.

The first part of this paper, entitled "The Early Years, from 1965," reexamines the college system's founding statement, with special attention to the issue of transfer from the colleges to universities. The founding statement did not rule out the possibility of transfer from college to university; provision was made for a subsequent review of the question, and there was some anticipation that universities might conduct one or two years of their own degree courses within the colleges. However, college-originated transfer programs which would steer college students towards advanced placement in universities were specifically ruled out.

Early debates concerning the transfer issue revolved around opposing sets of values: accessibility versus program integrity, academic or disciplinary-based education versus career-centred or practical training, responsive and flexible programming versus traditional university-based curricula. Whether or not these sets of values were necessarily in opposition to each other, the perspective of many faculty and students in Ontario's colleges of applied arts and technology was that there existed a relatively rigid, binary system in which transfer from a college program to a university program was neither signposted nor encouraged.

A number of structural elements within the college system, including the diversity of programming, the admission of students from other than academic streams in high school, and the recruitment of faculty from business and industry rather than from the universities, all tended to inhibit university acceptance of transfers from college programs, except on a case-by-case basis. The transfer issue was further inhibited by college-originated program design and development which fostered flexibility and community orientation of curriculum but confounded system-wide transfer potential, including inter- and intra-college transfer of course or program credits.

The second part of the paper moves to the contemporary context. The mature college system now operates within an increasingly knowledge-based, technologically-oriented, intensely competitive global environment. Demographic change, the expansion of knowledge, and new technological imperatives can be expected to significantly impact on the conditions of worklife, and therefore on education and training. Of particular concern are the likely upgrading and continuing education needs of those who have already graduated with a college diploma or university degree and who are in the workforce. Factors conducive to

flexibility and increased transfer potential have tended to intensify over the past twenty-five years. A sampling of current transfer conventions in other North-American jurisdictions provides comparative detail about articulation structures and arrangements prevailing elsewhere.

The third and final section of this paper considers four theoretical models or "visions" which might be used for further discussion and review of the college to university transfer issue within Ontario's contemporary (and unique) context. The four models may be succinctly described as (1) the present system, (2) the present system with a systematic review of credit transfer possibilities, (3) the present system with some change to selected program contents and entrance or exit requirements in order to enhance transfer possibilities, and (4) the present system with the introduction of new college transfer programs in selected areas. Three additional administrative options which could be utilized to heighten transfer potential for each of the models are also identified.

These four models illustrate a conundrum. If more emphasis is to be placed on enhancing college to university transfer potential, then added weight will have to be placed on academic or discipline-centred programming, as opposed to the practical, career-oriented programming for which Ontario's colleges were purposefully designed. Although the findings of this working paper are not presented as either comprehensive or conclusive, the four conceptual models do demonstrate aspects of the transfer issue which might usefully be considered in further review and discussion. Of special importance, detailed evaluation of various kinds of transfer and articulation models is needed in order not to preclude desirable courses of action for the future.

Réflexions sur le Transfert des Étudiants au Palier Collégial

Sommaire

Ce document fait partie d'une série d'études destinées à favoriser la discussion dans le cadre de Vision 2000, un projet d'étude du mandat, du rôle et de l'orientation future des collèges d'arts appliqués et de technologie de l'Ontario. L'équipe de travail 5 s'est penchée sur le sujet des collèges et du monde de l'éducation. Son travail a principalement porté sur l'articulation des liens entre les collèges et les écoles secondaires et entre les collèges et les universités. Le présent document traite des dispositions anciennes et actuelles se rapportant au transfert des étudiants des programmes d'études collégiales aux programmes d'études universitaires.

La première partie du document, intitulée «The Early Years, from 1965», analyse l'énoncé original fait au moment de la création du réseau collégial et porte une attention particulière à la question du transfert des étudiants des collèges aux universités. L'énoncé original n'excluait pas cette possibilité; des dispositions ont en effet été prises pour que cette question soit ultérieurement étudiée et certains prétendaient même que les universités offriraient, dans les collèges, des programmes d'études d'une ou deux années conduisant à l'obtention d'un diplôme. Toutefois, les programmes collégiaux visant à favoriser le transfert des étudiants vers les universités ont été exclus.

À l'époque, le débat au sujet du transfert des étudiants tournait autour de valeurs contradictoires : l'accessibilité ou l'intégrité des programmes, une éducation académique et orientée vers certaines disciplines ou une formation pratique et orientée vers une carrière, des programmes d'études souples bien adaptés aux besoins ou des programmes plus traditionnels de type universitaire. Sans chercher à savoir si ces valeurs sont réellement contradictoires, le fait demeure que de nombreux enseignants et étudiants des collèges d'arts appliqués et de technologie de l'Ontario étaient d'avis qu'il s'agissait d'un système rigide et binaire au sein duquel le transfert des étudiants des collèges aux universités n'était ni découragé ni favorisé.

Au sein du réseau collégial, un certain nombre d'éléments structuraux (dont la diversité des programmes, l'admission d'étudiants venant de programmes d'études secondaires non pédagogiques et l'embauche d'enseignants venant du monde des affaires et du milieu industriel plutôt que du milieu universitaire), ont tendance à empêcher les universités d'accepter les transferts généralisés d'étudiants collégiaux, sauf dans les cas individuels. Le transfert des étudiants a en outre été limité par les programmes collégiaux souples et adaptés aux besoins locaux, mais qui ne donnaient aucune possibilité de transfert entre les collèges, les cours ou les programmes.

La seconde partie du document traite du contexte contemporain. Parvenu à maturité, le réseau collégial fonctionne désormais dans une société faisant de plus en plus appel aux connaissances et aux technologies dans un contexte extrêmement concurrentiel. Les changements démographiques, l'accroissement des connaissances et les nouvelles exigences technologiques auront sans aucun doute des répercussions sur la vie professionnelle et, par conséquent, sur l'éducation et la formation. On porte une attention particulière aux besoins de recyclage et d'éducation permanente des titulaires d'un diplôme d'études collégiales ou universitaires qui sont sur le marché du travail. Au cours des 25 dernières années, les facteurs favorisant la souplesse et les transferts se sont progressivement multipliés. L'analyse de quelques ententes établies ailleurs en Amérique du Nord au sujet du transfert d'étudiants donne un aperçu des structures et des dispositions existant dans ce domaine.

La troisième et dernière partie du document présente quatre modèles ou «visions» théoriques qui pourraient servir de base à une discussion et à une étude plus approfondies de la question du transfert des étudiants des collèges aux universités dans le contexte contemporain (et unique) de l'Ontario. En résumé, ces quatre modèles sont les suivants : 1) le réseau collégial actuel; 2) le réseau collégial actuel modifié en

fonction d'une étude systématique des possibilités de transferts; 3) le réseau collégial actuel modifié par des changements apportés au contenu de certains programmes, aux critères d'admissibilité et aux exigences de fin d'études dans le but d'accroître les possibilités de transferts; et 4) le réseau collégial actuel modifié par la création de nouveaux programmes permettant le transfert d'étudiants dans certains domaines. On présente également trois mécanismes administratifs qui pourraient être utilisés pour favoriser davantage le transfert d'étudiants dans le cadre de chacun des modèles.

Ces quatre modèles soulèvent toutefois une énigme. Si on doit mettre l'accent sur les possibilités de transferts d'étudiants des collèges aux universités, il faudra alors accentuer les programmes scolaires et orientés vers certaines disciplines par opposition à une formation pratique et orientée vers une carrière pour laquelle les collèges ontariens ont été créés. Même si on ne prétend pas que les conclusions de cette étude soient complètes et définitives, les quatre modèles théoriques révèlent certains aspects de la question du transfert des étudiants qu'il serait utile d'étudier davantage. Il serait d'ailleurs particulièrement important de procéder à une évaluation détaillée des divers mécanismes de transferts et à une articulation des modèles dans le but d'éviter d'exclure toute action future qui pourrait être souhaitable.

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Introduction

This paper is one of a series of working studies prepared for Study Team 5 within the Vision 2000 process.

The first part of this paper reexamines the founding statement of Ontario's college system with special attention to the issue of transfer from colleges to universities. Early debates concerning this issue, and structural arrangements inhibiting development of a relatively open transfer process, are reviewed.

The second part of this paper deals with the changed contemporary environment — particularly unprecedented demographic conditions, and the impacts of a technology-driven, knowledge-based, intensely-competitive global society on demand for continued education and training. A brief summary of the current situation of transfer in Ontario and in other North American jurisdictions demonstrates comparative perspectives.

The final section of the paper considers four "visions" or models which could be used in further study of possible transfer arrangements, and suggests further lines of research with respect to the transfer issue.

The Early Years, From 1965

(i) The College System's Founding Mandate

On May 21, 1965 the Honourable William G. Davis, then Minister of Education, introduced into the Ontario legislature a statement outlining the nature and role of this province's forthcoming system of colleges of applied arts and technology. His statement anticipated the passage of Bill 153, an act to amend The Department of Education Act, an occasion described by the Minister as "historic" and "a major step forward in the development of our education system". The Bill would provide:

> for the introduction of a new level and type of education, one which is still in keeping with our traditions and accomplishments. Above all else, it goes far towards making a reality of the promise - indeed of the stated policy - of this Government to provide through education and training, not only an equality of opportunity to all sectors of our population, but the fullest possible development of each individual to the limit of his ability. In this new age of technological change and invention, also, it is essential to the continued growth and expansion of the economy of our province, and of our nation, that adequate facilities be made generally available for the education and training of craftsmen, technicians and technologists.

Following swiftly on a previous, far-reaching reorganization of secondary school programs, the building of a number of vocational schools in cooperation with the federal government, and the unprecedented expansion of university facilities, the new system of colleges was heralded as the co-ordination and culmination of previous development in Ontario's educational sector. In particular, the Minister noted that the relatively new four-year secondary school programs were generally becoming accepted, and opportunities for the higher education of graduates from these programs would be needed. Most important, the Minister spoke of "a welding into a coherent whole...of the parts which have sometimes seemed fragmented and unrelated, so that we have a complete system extending from the kindergarten to the post-graduate level". The colleges of applied arts and technology were intended to be

> directly related to the applied arts and technology, for full-time and for part-time students, in day and in evening courses, and planned to meet the relevant needs of all adults within a community, at all socio-economic levels, of all kinds of interests and aptitudes, and at all stages of educational achievement.

The rationale for this new level within Ontario's educational spectrum related to recent changes and developments in work and education which made the creation of the colleges essential. Three major factors had been identified:

The "knowledge explosion" made it obvious that information applicable to certain fields — science, in particular — was doubling about every ten years. As a consequence, a much higher level of education would be required by virtually everyone.

> Further education must be provided in a variety of courses or programs, varying in length from a few weeks to six or more years; in new types of institutions as well as in universities, and for part-time day and evening students, as well as for full-time day students, for adults as well as for youth, and for the upgrading and updating of workers either on the job or in evening courses, as well as for the unemployed.

A second factor, "the new technological revolution", also required much higher levels of educational qualification on the part of those who manage or work with highly technical systems or equipment. The Minister especially noted that "if we hope to continue to compete for markets on even terms at home and abroad" Ontario would have to provide the facilities for education and training at much higher levels than had previously been the case.

The third factor was "the population explosion" which threatened "to engulf our secondary and post-secondary educational institutions for the next 20 years at least". A concurrent, extraordinary increase in retention rates had contributed additional pressures to existing secondary and post-secondary school systems.

In recognition of these three major factors, each of which presented compelling evidence of "overwhelming" demand, the new college sector would provide types of training to suit the interests of students for whom a university program would be inappropriate. A new kind of institution was envisaged. It would not be an imported and transplanted version of an American junior college, nor simply an adaptation of the university-transfer college model then being developed in Alberta and British Columbia. The new colleges in Ontario were intended to be

> composite or comprehensive institutions...providing a wide variety of programs of varying length, including work-experience programs, by day and in the evening, for adults as well as for youth, and for probably more part-time than full-time students...[Programs] will be occupation-oriented for the most part; they will be designed to meet the needs of the local community - and they will be "commuter" colleges.

Responsiveness to local community needs was recognized. Three other responsibilities of each new college were also emphasized:

1) to provide courses of types and levels beyond, or not suited to, the secondary school setting;
2) to meet the needs of graduates from any secondary school program, apart from those wishing to attend university; and
3) to meet the educational needs of adults and out-of-school youth, whether or not they are secondary school graduates.

The founding statement also addressed the wide range of programs to be offered in most if not all colleges:

a) Engineering technician and technologist programs below university level
b) Semiprofessional non-engineering type programs (eg. in the para-medical field)

c) High level programs in office and distributive occupations, specifically of junior and middle management level, and including courses for small business

d) Agricultural and agricultural-related programs, at least in rural areas, in co-operation with the Department of Agriculture

e) General adult education programs, including cultural and leisure time activities

f) Programs of recreation, including physical education

g) General or liberal education courses, including remedial courses in basic subjects, and often incorporated as part of the other programs (eg. English, Mathematics, Science)

h) Retraining, upgrading and updating courses

i) Trades skills, pre-apprenticeship, and apprenticeship training

j) Service industry courses (eg. for tourist industry)

k) Commercial courses

l) Other courses to meet local needs.

This ambitious range of programs and courses anticipated in the founding statement was to be a characteristic feature of Ontario's colleges of applied arts and technology, as with many other new community colleges across Canada.

Dennison and Gallagher have observed that

> ...the new colleges were first characterized by the comprehensiveness or multi-purpose dimensions of their curricula. The principle of comprehensiveness required that they offer a mix of different programs, for a mix of students with different abilities and past achievements, with a mix of educational goals, within a single institution... [Dennison and Gallagher, 70]

In Ontario, the comprehensiveness of college curriculum offerings would have a significant impact on the college to university transfer issue.

(ii) Student Transfer and the Founding Statement

A key remark in the document deserves special attention:

> With respect to the general or liberal education courses, and the general adult education programs, I would point out that these are not thought of as university level courses. Nevertheless no able and qualified student should be prevented from going on from a College of Applied Arts and Technology to a university, and indeed such a pattern exists today for able graduates of our institutes of technology, as you may know. The university doors should always be open to capable and ambitious young men and women...

The founding statement did not preclude the possibility of transfer from college to university. To the contrary, specific provision was made for a committee to consider "the conditions and procedures under which universities may grant admission to outstanding students who have completed successfully an appropriate program at one of our colleges..." As well, the Minister anticipated circumstances in which "some of our universities will make arrangements with particular colleges...to conduct one or two years of their own degree courses within those colleges."

What was ruled out in the founding statement, quite specifically, was provision for "transfer programs" or university-parallel courses which would steer students toward advanced placement in universities. The exclusion of transfer programs in colleges was based on two perceptions: first, that there was no need for such courses in Ontario in 1965 because of the existence of Grade 13 which had been specifically designed as a

university preparatory program; and second, that the expansion of existing universities appeared to be sufficient to meet the presumed needs for accessibility to university for the foreseeable future. However, the founding statement included a very important caveat; with respect to transfer programs, the Minister stated that "if circumstances so require, we will naturally change or make adaptations to our present plans."

In essence, the colleges had been directed to design and offer self-standing courses and programs founded on pragmatic, occupation-centred objectives. Program advisory committees and college planners were enjoined to design curricula which would meet the career-related requirements of students and their prospective employers, without concern for whether the resulting courses on programs would mesh with university admission prescriptions or advanced standing conventions. Theoretical approaches and general education could be significant, vital components of college programs, but there was no forgetting that success would be measured by effective integration of CAAT graduates into Ontario's technically-proficient workforce. The bottom line was that CAAT graduates would get jobs.

(iii) The Student Transfer Debate

W.G. Fleming records in Ontario's Educative Society, Volume IV (1971) that there were many different opinions expressed on the merits of establishing a CAAT system in which the colleges would not act as feeder institutions to the universities.

During and following the passage of Bill 153 amending The Department of Education Act and accompanying regulations, there were recurrent debates in the Ontario legislature (as elsewhere) on the subject of the transfer issue. On every possible occasion government spokesmen took care to explain a fundamental commitment to university expansion, and to the provision of sufficient places for all qualified candidates who sought university education. For example, in a presentation to the legislature in May 1967, the Minister of Education reviewed existing provisions for university entry:

> There was the normal route through secondary school and Grade 13; there would be upgrading courses in Grade 13 subjects in the new colleges; most universities had a provision for admitting mature adults with less than the usual formal requirements; the universities were arranging for transfer from the colleges on an individual basis; and communities that felt they needed university courses could arrange to have universities give them under college auspices. [Fleming, 514]

The Ontario Council of University Faculty Associations (OCUFA) assumed a somewhat different perspective

> . . .in proposing that transfer be placed on a more clearly defined basis. [OCUFA] had been unable to see any reason why the universities could not announce a policy of admitting to first year all those who had completed two years' work at a community college with a certain proportion of academic work and a high standard of achievement, provided that the course they proposed to enter did not have matriculation prerequisites which they lacked. [Fleming, 515]

Dissonant voices, both inside and outside the college system, were not lacking. One side of the argument expressed concern that regularization of a standard transfer process would steer colleges towards the creation of courses and programs catering to university-bound students. President Claude Bissell of the University of Toronto warned that the colleges must not be imitative of university curricula, while Norman Sisco of the Department of Education asserted the need for colleges to avoid the temptation of an overly academic approach. And while some believed that further linkages between the colleges and universities could result in the distortion of otherwise self-reliant college programs, others feared that the colleges could become a dead end in terms of educational opportunity, or that students were in danger of being caught in an educational backwater of distinctly lower level if transfer arrangements were not well signposted and conveniently accessible.

In May of 1968 the university presidents issued a press release confirming a relatively cautious position.

> The universities of Ontario were prepared to consider outstanding graduates of colleges of applied arts and technology and other non-university institutions of post-secondary education. In general, they would consider for admission to second-year programs those who achieved high standing in a three-year college program... Similarly, students would be considered for admission to first-year programs if they had first-class or, in some cases, "high", standing in two years of non-university post-secondary education. [Fleming, 518]

(iv) Factors Inhibiting Transfer Arrangements

There was understandable apprehension on the part of admissions officers and other authorities within universities when college-related transfer determinations had to be made. Awareness of both the diversity of college programs and variability of student populations tended to make the transfer issue more difficult. In 1968, for illustration, the government had transferred administrative control of the Ontario Manpower Training Program to the colleges. In terms of meeting pressing needs of adults within the community, such a change was a logical extension of college responsibilities. At the same time it brought a relatively large influx of older adults, a more rapid turnover rate, and a conspicuously diminished academic image to emergent college operations. The unsettled public impression of the colleges was further diffused with the increasing range of activities in continuing and adult education and extension programs which the colleges promoted and offered. This heterogeneous student body and eclectic assemblage of evening, weekend and other part-time programs and courses may have contributed to somewhat disparate impressions about the college constituency. On the part of university administrators and registrars there may well have been a consequent disinclination, in practice, to accept transfers from college programs on any wholesale or automatic basis.

Both lower requirements for admission to college post-secondary programs, and the general pattern of instructor appointments to the colleges tended to inhibit university acceptance of equivalency as far as college to university transfer was concerned. In terms of admission to college post-secondary programs, for example, it was recognized that students did not have to come from the five-year "academic" stream in the high schools, and therefore might on transfer lack appropriate preparation for the more academic university programs. In somewhat the same vein, it was widely recognized that the hiring policy of the colleges was to maintain flexibility and to avoid forcing college teachers through existing patterns of teacher preparation. While academic credentials would not be a liability, colleges were recruiting their staff from business, industry and high schools, and not necessarily from universities. The practical implication of this strategy from the university perspective was that one, two or three years of college experience, albeit in a post-secondary program, were different from the equivalent experience in a university setting. Such perceptions on the part of university officials inhibited any unabridged acceptance of transfer credits from college students.

Other factors compounded the college to university transfer issue. The colleges inherited from their predecessor institutions, the institutes of technology and the vocational centres, "a system of programs with definite barriers between them" [Fleming, 569]. Under such circumstances, in which shifts from shorter to longer programs were often quite difficult, it became crucial to ensure that students made realistic choices upon entry. However, the first year classes included students with a very wide range of abilities, and the counselling available to incoming students was not uniformly competent or objective.

Another factor impeding transfer flexibility related to the circumstances of program design and development. College programs tended to originate at the grass roots level, some carrying over from a predecessor institution, and some emerging from the work of a college-based program advisory committee which was designed to involve significant employer and community input. Although a number of programs originated with government at the provincial level, a general diversity of program origin naturally gave rise to a wide variety of curricula within the different colleges; this diversity tended to work against any centralizing thrust or tendency to uniformity with respect to guidelines issued by the Applied Arts and

Technology Branch. One of these guidelines dealt specifically with the transfer potential of college programs:

> All programs should be sufficiently flexible so that students may transfer from one type of program to another within a college and from one institution to another without undue loss of time and credit. Transfer from one type of program would normally mean that there would be a "loss" in terms of the time devoted to the specific vocational aspects of a particular program of studies. However, the non-vocational aspects of specific programs should involve the study of a selection of general education subjects, credit for which should be readily transferable. [quoted in Fleming, 574]

The transferability of general education credits (much less specific vocational credits) was jeopardized by erosion of general education components within post-secondary programs, often rationalized on grounds of a need for either efficiency or increased occupational focus. The increasing competitiveness of colleges and the compartmentalization of their organizational structures as they increased in size further inhibited the credit transfer opportunities of students. In fact students came up against rigidities on many fronts, not just in attempting to transfer from college to university. Over time it also became apparent that college to college transfer arrangements within the college system were far from optimal. In fact, transfer arrangements between campuses, between part-time and full-time studies, and even between programs within the individual college were often fraught with irritants and outright obstacles.

The Contemporary Context

The mid-sixties in Canada will be remembered as an enthusiastic and exhuberant era, propelled by a relatively youthful population, economic success, and wonderful prospects for a productive and prosperous future. Expo '67 in Montreal had been a celebration not only of a nation's first hundred years, but also of its future hopes and almost unbounded expectations. In one perspective, Ontario's innovative system of colleges of applied arts and technology had shared the spirit of those times; the colleges had been planned and developed with a view to turning the energy, resourcefulness, and enthusiasm sparked by centenary celebrations into an enduring legacy.

A burgeoning, youthful population and the economic buoyancy of the nineteen-sixties translated into the determination by government to make available appropriate post-secondary opportunities, which would in turn meet new occupational requirements with appropriate educational and training initiatives. Widespread public support for advanced education, and a corresponding enthusiasm on the part of federal and provincial governments, resulted in generous and abundant public funding. The ensuing deployment of massive resources in support of post-secondary education development had no precedent in Canadian higher education.

(i) The New Environment

By 1989 the environmental conditions had changed dramatically. The colleges of applied arts and technology had moved through successive phases of introduction and rapid growth; they had now achieved maturity. Within the college system, planning and direction-setting had moved from a preoccupation with emergence and growth to a new emphasis on renewal.

From the founding statement of 1965 had grown a network of colleges (now twenty-three) offering some 2000 post-secondary program titles. By 1989, full-time post-secondary enrolment was about 95,000 students, out of a total full-time enrolment of more than 110,000. An additional 750,000 course registrations (in 1987) suggest the volume and range of part-time activities offered by the colleges. In 1987/88 there were 26,896 graduates from the college system. To round out the picture, the college system employs more than 8,400 full-time faculty, and receives operating grants from the province in the range of $700 million annually. By

any yardstick, Ontario's colleges of applied arts and technology have evolved substantially; they now comprise a large, mature system. Necessarily, such a system is both influenced by and responsive to social, economic and other factors within its environment.

The original founding statement of 1965 had recognized three major factors as evidence of need for the new colleges: the population explosion, the new technological revolution, and the expansion of knowledge. In 1989, each of these factors continues to play a major if somewhat different role in the current college environment.

The effects of a changed demographic situation, for example, may be profound. A rising median age accompanying the reduction of the cohort of traditional post-secondary age (17-24) and the growth of older cohorts, especially in the 25-44 age group, creates a considerably different population pool from which the colleges must recruit. New classes of students in the CAATs are likely to be older, on average, more mixed in terms of ethnic background, and more diversified in terms of prior schooling. It is believed that the pressures of technological adaptation and consequent worklife change will impact on participation rates, particularly in terms of increased post-secondary enrolment by older students in mid-career retraining, upgrading and continuing learning courses and programs.

It has been predicted that career paths for individuals may change four or five times in the course of a working lifetime. It is also expected that two or three years of full-time college education and training may be less attractive to future cohorts of students than part-time, short-cycle and modularized programs which can be fitted into a personal timetable which includes full-time work. This factor is particularly significant in the light of an estimate by Statistics Canada that in 1986, of the population in this country 15 years of age and older (15,594,000 persons) some 12.0 percent have achieved a post-secondary certificate or diploma, and 10.4 percent have a university degree. These factors together may suggest for the future a new emphasis on combining education and training with full-time work.

Concern for the new technological revolution, the second major factor, is even more pervasive today than in 1965. In Ontario, it has been widely recognized that industrial innovation has become crucial to improved economic performance. Our society is now more conscious than ever before - because of modern communications, transportation and other computer-based technologies - of the accelerating rate and pervasive influence of modern change, at home and around the world. A concomitant "globalization" of interests and perceptions has resulted. Studies of the Science Council of Canada and reports from the Premier's Council in Ontario attest that successful international competition requires a major commitment in favour of directing resources towards technology application and diffusion, and to the development of a highly trained and flexible workforce.

The third major factor identified in the founding statement relates to the rapid expansion of knowledge. In addition to core activities centred around career-oriented education and training, colleges contribute in many ways to applied research and to the transfer and diffusion of relevant technology for institutional, industrial, and commercial uses. Such initiatives include, for example, the Woodworking Skills Centre at Conestoga College, or the new Manufacturing and Automation Centre at Durham College. Responsiveness to the implications of technological change will become increasingly important if, as some observers predict, the pace of transformation accelerates. Ontario's colleges will have a key role to play in strengthening the ability of business, industry, and society in general to respond to changes which are enormous and inevitable, including, for example, new patterns of work organization and a changing mix of work, education and leisure. In the face of changing conditions, including major social and occupational transformation, planning and direction setting require optimum flexibility, cooperation and communication.

From this general perspective, the transfer issue assumes fresh importance. If responsive and constructive adaptations to change are essential to post-secondary educational programming, as elsewhere, then barriers and constraints impeding flexibility and portability need reexamination. Present arrangements for transfer among Ontario's post-secondary institutions and their respective programs are a case in point.

(ii) Transfer Arrangements in Ontario

The publicly-funded post-secondary situation in Ontario in 1989 is characterized by a binary system in which the colleges of applied arts and technology and the universities offer quite different types of programs in parallel streams. Students are offered limited opportunities for inter-system transfer of academic credits; *Horizons: A Guide to Postsecondary Education* sets forth a guarded reference to "Transfer Possibilities for CAAT Graduates" in the following terms:

> While it is not intended that the CAATs should act as feeder institutions to the universities, graduates of two-year programs may be accepted on an individual basis for admission to the first year of certain university programs.
>
> Qualified graduates of the three-year programs may, in some instances, be admitted to the second year of a related university program. For example, a graduate from an engineering technology program may qualify for admission to a university degree program in engineering, if places are available. Decisions about the admissibility of individual CAAT graduates to degree programs are made by the admissions officer of the universities concerned.

The *Horizons* statement deals essentially with admissibility and thereby avoids a troublesome distinction involving "course transferability" (which would allow a student to transfer a specific course in one institution for credit in another program in another institution) and "credit transferability" (which would allow a student to transfer a set of course credits from one institution and apply these for advanced standing at another institution). With respect to both these types of transfers, applications by the students concerned are most often handled on a case-by-case basis within the admissions office of the receiving institution. The admissions policies of Ontario universities are not uniform with respect to transfer, especially with respect to assessing requisite levels of attainment before transfer credit is awarded. In general, the majority of Ontario universities indicate that applicants who have completed one year of college study are not eligible for admission to the first year of university unless they have also earned the appropriate secondary school credits; these credits cannot be earned in a college of applied arts and technology in that normally only a high school principal may accord this type of certification.

Statistics from the Ontario Universities Application Centre at Guelph indicate that for 1986, 3.3% of university registrants (1,362) entered university after having spent some time in the college system [*Admission Data System Report: 1987*, Council of Ontario Universities, Table 11.1]. Approximately half (677 of 1,362) of these registrants were college graduates who proceeded directly to university. The 677 college graduates who entered university immediately upon completion of their program in 1986 represented 2.5% of the total college graduates of that year. This proportion has been relatively stable over the five-year period from 1982-83 to 1986-87, ranging from 2.3% to 2.7%, as shown in Table 1 [College Graduate Placement Survey].

TABLE 1

College Graduates Attending University Immediately After College

Year	# of College Graduates	# Attending University	% Attending University
87-88	26,271	679	2.6%
86-87	26,733	677	2.5%
85-86	27,163	624	2.3%
84-85	27,570	624	2.3%
83-84	26,402	688	2.6%
82-83	24,514	672	2.7%

[College Graduate Placement Reports]

There has also been some movement of students in the other direction - from universities to the colleges. Of the approximately 95,000 full-time post-secondary students on the colleges in 1986-87, 5.2% had some previous university experience, while a further 1.7% were university graduates. These figures displayed a slight upward trend over the four year period from 1983-84 to 1987-88, ranging from 4.6% in 1983-84 to 5.1% in 1987-88 and 1.6% in 1983-84 to 1.8% in 1987-88 respectively, as shown in Table 2 which follows.

TABLE 2

College Students (Full-Time Post-Secondary) With University Education

Year Fall	% With Some University	% University Graduates
1987	5.1 %	1.8%
1986	5.2%	1.7%
1985	4.9%	1.7%
1984	4.6%	1.5%
1983	4.6%	1.6%

[Source: Ontario College Information System]

(iii) Transfer Arrangements in British Columbia, Alberta and Quebec

Across Canada, there is considerable provincial variation with respect to how college-university transfer is arranged. Three well-developed provincial systems of comparative significance exist in British Columbia, Alberta and Quebec.

The legislated mandate of B.C. public colleges includes provision for programs of study equivalent to the first and second year of university programs, in addition to other programs in vocational and continuing education. In effect, students can do the first two years of university study within a two-year transfer program. A recent report of The Provincial Access Committee to the Minister of Advanced Education and Job Training has recommended the establishment of a Co-ordinating Council to provide a mechanism for the resolution of difficulties relating to admissions, transfer and articulation.

There are eleven colleges in Alberta, seven of which are specifically mandated to provide two full years of university level arts and science programs. Such university "transfer" programs are distinct from the vocational programs offered at these same college-level institutions, although vocational programs at the Alberta colleges do include individual courses for which transfer credit may be given (examples might include an English or mathematics course within a technical program). Each university is autonomous and sets its own transfer policy with respect to acceptance of course equivalency. However, the post-secondary institutions in Alberta are also served by the Alberta Council on Admissions and Transfer, a publicly-funded body designed to encourage inter-institutional co-operation. One purpose of the Council is to develop transfer arrangements between institutions as alternatives to formal affiliation agreements. The Council publishes an annual guide on university transfer practices and equivalences.

The Quebec Colleges d'Enseignement General et Professionel (CEGEPs) do not offer university transfer programs as such. Rather, the CEGEPs provide two-year university preparation programs which are required for admission to universities in Quebec. In addition, the CEGEPs offer three-year career-centred terminal programs which would not normally lead on to a university program.

(iv) Transfer Arrangements in the United States

Within the United States transfer agreements have existed in different jurisdictions since the beginning of the junior (two-year) college movement. State agencies and commissions have become increasingly

involved with transfer-related issues in recent years, both in terms of state legislation and regulations promulgated within the state education codes.

Three types of transfer agreements exist:

1) formal and legally based policies;
2) administrative policies; and
3) voluntary agreements between institutions.

Formal and legally-based transfer policies are often established on the basis of statutes or regulations. States having such policies focus on the transferability of a set core of general education courses and/or completed programs. Only a few states have developed policies related to the acceptance of transfer credits for those who have not completed a program, leaving applications in such cases to be treated on an individual basis. Formal and legally-based transfer policies have been employed in Florida, Georgia, Illinois, California, Massachusetts, South Carolina and Texas.

Administrative policies favouring transfer arrangements are often enforced by a state agency assigned with that specific responsibility. This type of administrative approach has been employed in New York, New Jersey, Pennsylvania, Kansas, Minnesota, Washington and others.

In a number of other states voluntary agreements have been established to promote different approaches which are not assigned by statute or regulation. Broad guidelines are often established by state governments, while specific arrangements are negotiated between a university and individual community colleges. This situation is to be found in Michigan, Connecticut, Maine, South Dakota, Arkansas, Delaware and others. Some states — for example, New York, Michigan and California — deploy more than one of the approaches described above.

(v) Observations

From this brief review of the current context and comparative situations, the following summary observations can be stated:

a) The transfer concern is an endemic or recurrent issue requiring change and adjustment from time to time. Its importance as an issue will intensify over time if socially-induced pressures for new knowledge, technical skills training and upgrading, and appropriate credentials continue to grow.

b) Over the next decade post-secondary institutions are likely to receive more and more applicants not directly from high schools but from the workplace. In general, these applicants will be older and more diversified, particularly with respect to previous educational background and attainment. If accessibility remains as a key objective of Ontario's publicly-funded post-secondary systems, new approaches and new accommodations will become increasingly important in order to bring these diversified types of new entrants into mainstream post-secondary programs, either at the beginning of a multi-year program or at some appropriate mid-point in that program.

c) Existing college to university transfer conventions in Ontario are largely founded on the basis of curriculum integrity and the need to preserve and protect program quality. While such objectives are of fundamental importance, there is also need to meet the objectives of accessibility and responsiveness at the level of the individual student. The importance of client-centered learning concepts is likely to intensify as larger numbers of older and work-experienced aspirants seek to pursue a university or college program.

d) Ontario does not at the moment have an identifiable instrument that would in some sense bridge university and college system programming. Comparable jurisdictions have found it

possible and useful to establish a mechanism which would foster consultation, put forward policy suggestions for consideration, and encourage constructive practices promoting inter-system admissions, transfer and articulation. For example, universities and colleges in Alberta are served by the Alberta Council on Admissions and Transfer which encourages inter-institutional co-operation, especially transfer arrangements. A variety of other models have also been employed to facilitate transfer within comparable jurisdictions.

e) Within the college system itself, the issue of inter-college and intra-college transfer, as well as practices for transferring credit for continuing education courses to full-time programs, begs further detailed examination if the objectives of flexibility and responsiveness are to be achieved.

Issues, Questions and Possible Models

For the future, the pace of development of new technology will be as great, if not greater, than for the time since the colleges were established; the pace of change and breadth of diffusion of new technology is almost unimaginable. Moreover, the new technology will add further fuel to the "knowledge explosion", and to new demands by those in business and industry who have to cope with its implications and competitive pressures. The impacts of new technology on the nature of jobs, when combined with expanding world-wide competition, will intensify the search for opportunities of lifelong learning among employees and employers. The demographic conditions — the movement of the baby boom generation into and through its mid-life period — will ensure in terms of sheer numbers that the desires for lifelong learning opportunities are not limited to a relatively small proportion of the population. It would also seem likely that applied and theoretical knowledge will increasingly be viewed not as distinct categories, but as complementary, in the labour force. Both will be needed in the course of a working life-time within a knowledge-based, globally competitive industry.

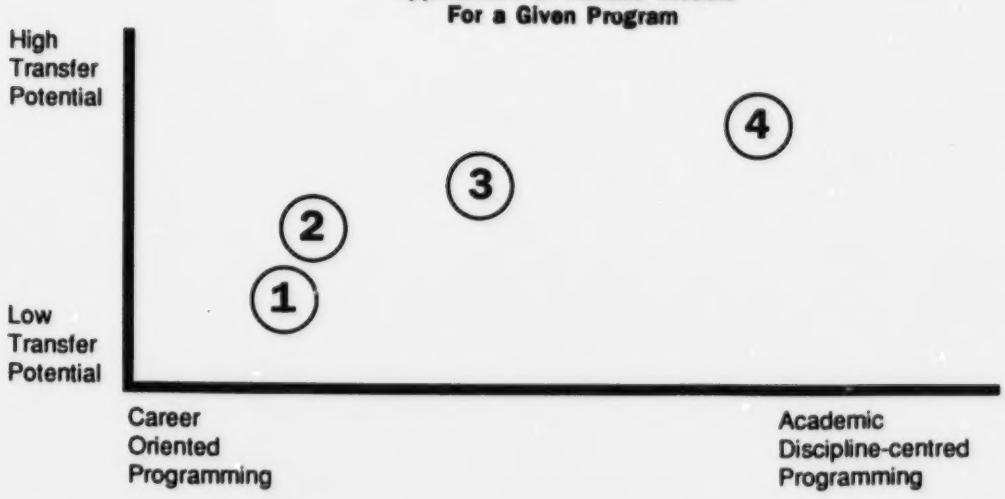
If one accepts these notions, then a series of curriculum questions follows. What institutional learning opportunities ought to be available for college graduates, present and future? For some, returning to college for post-diploma programs or courses might meet their needs; for others, the nature of programs and courses offered by universities will be more consistent with their requirements. For this latter group, what opportunities should be available within Ontario's post-secondary institutions for the application of college credits towards university degree and certificate programs? And extending this question somewhat, what should be the transfer opportunities for college students who have not completed their college programs, or for new high school graduates who desire admission to university but who were not accepted in their initial attempt? Clearly there is a range of possible clients, and a range of programming options; alternatives ought to be available to respond to different needs.

The conundrum for the college system is that in order to make possible quantitative and qualitative improvements to existing transfer arrangements, existing college curricula may have to change. Early spokesmen for Ontario's college system perceived a real danger; encouraging development of university transfer programs could imply that colleges might become less job-centred and career-oriented, and would instead become more academic and theoretical. In other words, there are significant trade-offs to be evaluated with any movement in the direction of enhanced transfer opportunities.

This situation may be depicted graphically. On a horizontal axis, it seems possible to imagine a line between two points, the one on the left titled "career-oriented programming" and the one on the right titled "academic discipline-centred programming". Thus any point on this "curriculum" axis would reflect a relative emphasis appropriate to the two points. Similarly, there might be an intersecting vertical axis as in Figure A reflecting transfer potential from a low point at the bottom entitled "low transfer potential" to a high point at the top entitled "high transfer potential".

FIGURE A

Application of Various Models For a Given Program



Utilizing Figure A, it is possible to depict graphically a number of situations that Ontario colleges could face with respect to the development of transfer arrangements. Because transfer possibilities are now relatively low across the system, and because programming within the colleges is applied and career-centred, the present Ontario situation would fall at about point 1 on Figure A.

Other possibilities can also be plotted. The following four models — and associated administrative options to be described on page 14 — can be used to create a number of possible "visions" as a prelude to further discussion and review of the college to university transfer issue.

Model 1: The Present System has a number of merits, not the least of which that it was designed to meet recognized needs in Ontario (the existence of Grade 13, for example). This model, which is depicted as position 1 on Figure A, anticipates a situation no different from what currently prevails, with the possible exception that additional information about existing transfer arrangements might be more widely disseminated.

Possible advantages:

- No requirement for change which could be time-consuming and costly.
- Conforms with conventions previously established.
- The publication of existing transfer arrangements might encourage other colleges to negotiate additional transfer conventions.

Possible disadvantages:

- Would not recognize demands for increased flexibility or responsiveness arising out of occupational change projections, current demographic patterns, OS:IS etc.
- Could perpetuate an uneven and limited system.
- Would not motivate improved information flow and discussions about programming between colleges and universities, or between colleges and colleges.

Model 2: A Systematic Review of Credit Transfer Possibilities (with no change of either college program contents or existing college entrance and exit requirements, but with detailed program-by-program review among post-secondary institutions to seek out transfer opportunities where they might currently exist). Subsequently there would be wide-spread

dissemination of information and probably publication of transfer arrangements for each program. Because it entails no programming changes, this model would be plotted in position 2 of Figure A.

Possible advantages:

- Accessibility to college programs by "average" students, for example, grade twelve general program graduates, would not be adversely affected;
- Widespread dissemination for students of transfer information.
- The existing applied or occupational orientation of college programs would be unaltered.
- College students and graduates would have full knowledge of available transfer opportunities.
- This model is the only option which could benefit those who have already graduated.

Possible disadvantages:

- Opportunities for transfer to universities would continue to be uneven from one college to another.
- The review process may involve significant expenditure of resources at the outset.

Model 3: Some Change to Selected Program Contents and Entrance or Exit Requirements (in order to foster heightened possibilities of subsequent transfer to universities). Because this option necessarily increases "academic" components of college programs, it is depicted as position 3 on Figure A.

Possible advantages:

- Transfer opportunities would increase for future college graduates (but not for past graduates).
- Possibly greater homogeneity across colleges of appropriately adapted programs which, in turn, should lead to less uneven university transfer opportunities among colleges and greater inter-college transfer opportunities among colleges.
- Possibly more emphasis on liberal arts education and/or theory.

Possible disadvantages:

- If program changes involved raising the entrance and/or exit requirements, access of Grade 12 graduates to college programs could be adversely affected;
- Increasing the liberal arts component of college programs could diminish demand from the 18-24 year old population; impressionistic evidence would suggest that students from this age group are usually seeking occupational-specific training with little emphasis on the liberal arts components which are more "respectable" from an academic point of view. Also, employers may not be satisfied if the liberal arts component of a college program was increased at the expense of its occupation-specific components.
- Program content changes might require increasing both duration and cost of college programs.
- College programming decisions and priorities might increasingly be affected by standards and requirements set by the university sector. This factor could in turn diminish the college's response time in dealing with quickly emerging training needs.

Model 4: Introduction of New College Transfer Programs (which would allow college faculty to offer the equivalent of one or two years of university programming). Students of such programs would transfer to university with full transfer credit for work taken in college. Model 4 is therefore a quasi-university program and is plotted as point 4 on Figure A.

Possible advantages:

- Could be initiated on a program by program basis.

- Priorities could be adjusted to suit provincial or college conditions.
- Increased accessibility by students to university-type programs offered on college campuses.
- Accessibility, particularly by those in the 18-24 age cohort, to university programs should increase.
- Public expenditures per university graduate would decline if the college portion of the university training were less expensive than the equivalent training in a university.
- Takes pressure off universities to adjust to increasing enrolment (and takes pressure off colleges to adjust to decreasing enrolment).

Possible disadvantages:

- Two distinct classes of college programs — "university" and "non-university" — could exist, with the status of those (staff and students) in the university programs likely being higher.
- The introduction of transfer programs would not necessarily improve the accessibility to university of graduates from "non-university" college programs.

Variations are obviously possible within each of the four models above; for example, each model could include one or more of the following options.

1) A transfer instrument, perhaps on the lines of the publicly-funded Alberta body, which would encourage systematic discussion and publication of inter-institutional transfer conventions.

2) Administrative arrangements which might foster inter-college and intra-college transfer arrangements. [For example, the program approval process might promulgate an additional requirement that applications for new or modified college programs include explicit information about program credits for students transferring into or out of that program, from or to closely related programs in other colleges. Over time, both information and constructive collaboration might improve significantly].

3) Improved data collection design and methodologies. Data which would enlighten the transfer discussion is often lacking. Not much is known about students who have experienced different kinds of post-secondary inter-institutional and inter-program obstacles and irritants. Quantitative surveys, especially longitudinal studies examining questions about the upgrading and diversification needs of graduates subsequent to completion of a first post-secondary program, would be useful.

   As well, further discrimination is needed with respect to data presently collected by the Ontario College Information System. For example, existing statistics on the origin of students entering college post-secondary programs include a category labelled "other post-secondary". Although this segment of full-time post-secondary college enrollment has changed significantly (from 1,847 students in 1976 to 6,115 students in 1987), present arrangements do not allow differentiation between students who are transfers from other CAATs, or from Ryerson Polytechnical Institute, or from other college systems, including private vocational schools. Further data discrimination will be needed if transfer opportunities are to be recognized and fine-tuned.

This working paper is neither comprehensive nor conclusive in its findings. It has been presented as a preliminary review of the college's foundation statement, together with contending points of view, and supplemented with consideration of the contemporary situation in comparative perspective. The contrast between the nineteen-sixties and the nineteen-eighties provides insight into how conditions have changed, and what these changes might mean for the question of transfer. Alternative visions or models arise from the context of the past, but point to quite different futures.

Necessarily, the perspective of the present study has been limited, but some directions for additional review have emerged. For example, further detailed evaluation of the various transfer models is needed in order not to preclude desirable courses of action for the future. Other collaborative patterns of program delivery involving both universities and colleges also need examination to determine the optimum patterns for transfer development. Given the rising numbers of college and university graduates, and probable increased demand arising from the conditions of a knowledge-based, technology driven, intensely competitive, global society, appropriate institutional response to the transfer issue will likely remain a considerable challenge for the foreseeable future.

June, 1989

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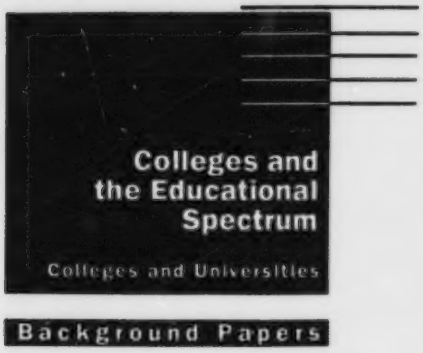

Robert Alexander Marshall

College-University Transfer Arrangements Existing in Ontario (Questionnaire Results)

Study Team 5

Summary

The purpose of this paper's research was to examine the linkages colleges have with universities. In this study, the college-university arrangements of greatest interest were those which involved the movement of college students into universities.

Each college was sent a questionnaire (19 responded) composed of three forms: Form A was designed to provide an inventory of college-university student arrangements which involved either the transfer of college students to university programs or the joint offering by a college and a university of a program; Form B was designed to collect specific detail on those arrangements identified in Form A; and Form C was designed to collect information on other types of arrangements colleges may have with universities (for example, the sharing of space or equipment).

In total, 27 arrangements were in operation in 1988, of which 23 were transfer (college to university) arrangements and 4 involved the joint provision of a program by a college and university. Of these 27 arrangements, 17 were developed after 1979, with 11 being implemented since 1988. In addition to the arrangements in operation in 1988, a number are about to be implemented or negotiated; colleges involved include: Durham, Centennial, Conestoga, Georgian, and Niagara.

Most of the program arrangements have been in the 'liberal arts' area and/or in areas that feed the service sector.

Under the program specific transfer arrangements, a student completing a 3-year college program generally receives, at maximum, credit equivalent to completion of 50 to 75% of a 4-year university program; a student completing a 2-year college program generally receives 2 years of university credit if entering a 4-year university program and 1 year of credit if entering a 3-year university program.

In addition to information collected on arrangements through the survey, university calenders revealed that where specific college-university transfer arrangements have not been negotiated, the maximum credit given to college students enrolling in university programs is 5 (the equivalent of one year of university), provided they meet specific requirements.

One of the major reasons for developing arrangements with a university is that arrangements made college programs more attractive to potential students and were seen as a means of increasing enrolment in particular programs; another reason frequently cited was that the arrangements between the colleges and the universities were seen as a means for enabling each institution to contribute what it does best to the education and training of students.

On the whole neither transfer nor joint arrangements have led to, or required, significant changes in the nature of college programs. Some respondents noted an increased emphasis being placed on "thinking" and "communication" skills.

While the survey respondents were generally in agreement that colleges should attempt to increase the number of arrangements with the university sector, they felt such arrangements should not adversely affect the colleges' ability to serve those seeking the vocational-oriented training traditionally provided by colleges.

Les ententes relatives au transfert d'étudiants des collèges vers les universités en Ontario

Sommaire

Le but du présent document de recherche est d'analyser les liens qui existent entre les collèges et les universités. Cette étude a surtout porté sur les ententes relatives au transfert d'étudiants des collèges vers les universités.

Chaque collège a reçu un questionnaire (19 collèges y ont répondu) comportant trois parties : la partie A permettait de faire l'inventaire des ententes qui existent entre les collèges et les universités au sujet du transfert d'étudiants à des programmes d'études universitaires ou des programmes d'études offerts conjointement par un collège et une université. La partie B visait à recueillir des renseignements particuliers au sujet des ententes mentionnées dans la partie A. Enfin, la partie C avait pour but de recueillir des renseignements au sujet des autres types d'ententes qui peuvent exister entre les collèges et les universités, comme le partage de locaux et d'équipement.

En 1988, 27 ententes étaient en vigueur. De ce nombre, 23 portaient sur le transfert d'étudiants et quatre sur la prestation des programmes d'études conjoints par un collège et une université. Parmi les 27 ententes, 17 ont été établies après 1979, tandis que 11 l'ont été depuis 1988. En plus des ententes qui étaient en vigueur en 1988, un certain nombre d'autres ententes étaient sur le point d'être mises en oeuvre ou d'être négociées par les collèges Durham, Centennial, Conestoga, Georgian et Niagara.

La plupart de ces ententes portaient sur des programmes d'études dans le domaine des arts ou dans des domaines liés au secteur des services.

En vertu des programmes relatifs au transfert, un étudiant qui termine un programme d'études collégiales de trois ans reçoit habituellement des crédits équivalant à un maximum de 50 à 75 pour 100 d'un programme d'études universitaires de quatre ans. Un étudiant qui termine un programme d'études collégiales de deux ans reçoit habituellement des crédits équivalant à deux ans d'études universitaires lorsqu'il s'inscrit à un programme d'études universitaires de quatre ans et à une année d'études universitaires lorsqu'il s'inscrit à un programme d'études universitaires de trois ans.

En plus des renseignements recueillis sur les ententes existantes, l'étude a aussi permis de constater qu'en cas d'absence d'une entente négociée entre un collège et une université sur le transfert d'étudiants, ceux qui s'inscrivent à un programme d'études universitaires reçoivent un maximum de 5 crédits, ce qui équivaut à une année d'études universitaires, à la condition de répondre à certaines exigences.

Parmi les principales raisons pour établir des ententes avec les universités, on souligne que ces ententes rendent les programmes d'études collégiales plus attrayants pour certains étudiants et sont considérées comme un moyen permettant d'accroître l'effectif de certains programmes d'études. Une autre raison souvent mentionnée est que les ententes entre les collèges et les universités sont aussi considérées comme un moyen permettant à chaque établissement d'enseignement d'apporter une contribution dans son secteur de spécialisation à l'éducation et à la formation des étudiants.

De façon générale, ni les ententes relatives au transfert d'étudiants ni celles se rapportant aux programmes d'études offerts conjointement ont entraîné ou ont nécessité des modifications importantes à la nature des programmes d'études collégiales. Certains répondants ont mentionné qu'ils constatent un accent plus prononcé sur le développement d'aptitudes de raisonnement et de communication.

Même si les répondants étaient généralement d'accord avec le fait que les collèges devraient tenter d'augmenter le nombre d'ententes avec les universités, ils soutiennent que ces ententes ne doivent toutefois pas atténuer la capacité des collèges de servir les personnes ayant besoin de la formation professionnelle traditionnellement assurée par les collèges.

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I. Introduction

The purpose of this study, as part of the Vision 2000 project, is to examine the linkages colleges have with universities. The linkage of greatest interest involves the movement of college students into universities. As well, there are other types of arrangements colleges might have with universities, such as the sharing of space or equipment, or university to college student transfers. In collecting information on existing linkages between colleges and universities, it is hoped that this information will assist Vision 2000's Study Team 5 to address the question: "What linkages *ought* to exist between colleges and universities?"

Each college was sent a questionnaire composed of three forms [for a copy of the questionnaire, please contact the Council of Regents]. Form A was designed to provide an inventory of college-university student arrangements which involved either the transfer of college students *to* university programs or the joint offering by a college and a university of a program. Form B was designed to collect specific details on those arrangements identified in Form A. Form C was designed to collect information on other types of arrangements colleges may have with universities (for example, the sharing of space or equipment).

Thus far, the response rate has been 86% (19 of 22 colleges have responded, still missing are responses from Confederation, Durham and George Brown). Not all colleges have institutionalized arrangements and responded to the questionnaire appropriately, as such a letter indicating no arrangements counted as a response. Some colleges have no formal arrangements in place for the transfer of students but may have other types of arrangements as identified on Form C. While the response rate has been good, the reader should be warned that not all those forms returned were fully completed.

The paper is structured in the following manner: Section II is subdivided into four parts with each part addressing specific questions on "Transfer" and "Joint" arrangements colleges have with universities; Section III looks at other types of arrangements in existence (as identified in Form C); Section IV provides a summary and conclusion to the study.

As is the custom, it is proper to thank a number of people who have assisted in preparation of this background study: Those involved in the design of the questionnaire; those who took the time to respond to the questionnaire; and Dr. Brian Wolfe at the Council of Regents.

II. Transfer and Joint Arrangements

(a) Description of Arrangements:

As Table 1 shows, for those colleges that have responded there are 27 arrangements developed with universities. This excludes those arrangements with Lakehead University (see Section III "Other Types of Arrangements" for an explanation). Twenty-three of those arrangements fall into the "Transfer" arrangements category. A "Transfer" arrangement allows for the transfer of some credits for students or graduates moving from a college program to a university degree program. There are four "Joint-D" arrangements, which involve the joint provision of the program by the college and university, ***and*** graduates of the program are eligible to receive a university degree (graduates may also receive some form of college certification). There are no "Joint-ND" arrangements, which are arrangements for the joint provision of the program by the college and university, ***but*** graduates of the program are not eligible to receive a university degree (the university provides selected courses in a college program for which only a college diploma or certificate is awarded upon successful completion of the program).

Table 2 shows in greater detail the college-university linkages which currently exist in Ontario. Among the notable highlights that emerge from this table is the fact that Georgian College and Sault

College have arrangements with American Universities. What is most interesting about Georgian College's arrangements is the great geographical distance that separates the college (in Barrie) from the university (in Michigan and North Dakota). Sault College's arrangements are with American institutions that are just across the border in Northern Michigan. As would be expected, other college arrangements are in the same geographical location; that is, with nearby universities.

The University of Windsor has the largest number of arrangements, with seven; Brock and McMaster each have three; York University has two; and Carleton University, Northwood Institute (Michigan), the University of North Dakota, the University of Ottawa, the University of Toronto (Erindale), the University of Western Ontario, and Western Michigan University each have one arrangement.

Table 1

Number of Arrangements by College and Type

College	Transfer arrangements *(1)*	Joint-D (2)	Joint-ND (3)	Total
Algonquin	1	0	0	1
Cambrian	0	0	0	0
Canadore	0	0	0	0
Centennial	1	0	0	1
Conestoga	0	0	0	0
Confederation*				
Durham*				
Fanshawe	3	0	0	3
George Brown*				
Georgian	2	0	0	2
Humber	0	0	0	0
Lambton	3	0	0	3
Loyalist	0	0	0	0
Mohawk	2	1	0	3
Niagara	2	0	0	2
Northern	0	0	0	0
Sault	5	1	0	6
Seneca	0	1	0	1
Sheridan	1	1	0	2
Sir Sandford Fleming	0	0	0	0
St. Clair	2	0	0	2
St. Lawrence	1	0	0	1
Total	**23**	**4**	**0**	**27**

*Have not responded

Notes: (1) 'Transfer' arrangements allow for the transfer of some credits for students or graduates moving from the college program to a university program.

(2) *'Joint-D' arrangements involve the joint provision of the program by the college and university, and graduates of the program are eligible to receive a university degree (graduates may also receive some form of college certification).*

(3) *'Joint-ND' arrangements involve the joint provision of the program by the college and university, but graduates of the program are not eligible to receive a university degree (for example, the university provides selected courses in a college program for which only a college diploma or certificate is awarded upon successful completion of the program).*

Table 2

College-University Arrangements by Program and Year of Implementation

College	Program	Arrangement with	Academic year when first implemented
Algonquin	Correctional Worker	Carleton University	1985
Centennial	General Arts & Science	York University	1975 (?)
Fanshawe	Social Service Worker	U. Western Ontario	1988
	Early Childhood Education	U. of Windsor	unknown
	Fine Art	U. of Windsor	unknown
Georgian	Civil Aviation	U. of North Dakota	1988
	Auto Marketing Business Administration	Northwood Institute (Michigan, U.S.A.)	1988
Lambton	General Arts & Acience	U. of Windsor	1974
	Business Administration	U. of Windsor	1974
	Early Childhood Education	Brock University	1979
Mohawk	Nursing	McMaster	1982
	Occupational Therapy	McMaster	1977
	Physiotherapy	McMaster	1971
Niagara	Business-Accounting	Brock University	1989
	Early Childhood Education	Brock University	1978
Sault	Pulp & Paper Engineering Tech.	Western Michigan	1987
	General Arts & Acience	Lake Superior State	1989
	Business Management	Lake Superior State	1989
	Hospitality	Lake Superior State	1989
	Nursing	Lake Superior State	1989
	Geology Technician	Lake Superior State	1989
Seneca	Early Childhood Education	York University	1976
Sheridan	Art & Art History	U of Toronto (Erindale)	1972
	Music Theatre Performance	U. of Windsor	1989
St. Clair	Early Childhood Education	U. of Windsor	1980
	Journalism - Print	U. of Windsor	1980
St. Lawrence	Registered Nurse-Critical Care	U. of Windsor	1988

As revealed in Table 2, most of the arrangements have occurred within the past decade; since 1979, seventeen of the arrangements have been implemented, and eleven of those since 1988. While the first arrangements appear to have been implemented in the early 1970s, college-university linkages are more a

phenomenon of the 1980s.[1] The reasons for this will be discussed when we look specifically at the reasons for developing arrangements later in the paper.

Table 3 shows enrolment (1986/1987) in the college programs for which there are "Transfer" arrangements (that is, the 23 arrangements shown in Table 1). With an estimated system-wide enrolment of 86,876 (this figure does not include enrolment numbers for Confederation, Durham, or George Brown) and an enrolment of 2,724 in programs that have transfer arrangements, it means that 3.1% of Ontario college students were enroled in 1986/1987 in college programs in which, as of 1989, specific transfer arrangements had been negotiated with a university. Tables 2 and 3 also show that business-related, Early Childhood Education, and General Arts and Science programs are the areas in which arrangements have been most frequently developed.

Table 3

Enrolment in College Program with "Transfer" Arrangements

Program	College	Total enrolment in program (1986-1987)
Automotive Marketing	Georgian	151
Business Administration (includes accounting, marketing, management)	Lambton	179
	Niagara	87
	Sault	64
Civil Aviation	Georgian	54
Correctional Worker	Algonquin	71
Early Childhood Education	Fanshawe	91
	Lambton	96
	Niagara	99
	St. Clair	66
Fine Art	Fanshawe	85
General Arts & Science	Centennial	199
	Lambton	140
	Sault	125
Journalism - Print	St. Clair	63
Geology Technician	Sault	11
Nursing	Mohawk	762
	Sault	127
Occupational Therapy	Mohawk	84
Physio - Therapy	Mohawk	92
Pulp & Paper Engineering Technology	Sault	29
Social Service Worker	Fanshawe	49

[1] The questionnaire was limited to collecting information on arrangements that currently in existence. It is possible that some previously developed arrangements have been cancelled, although no one has indicated that this has occurred.

One of the major purposes of the questionnaire was to obtain information on the amount of credit that could be awarded upon transfer from college programs. Specifically we wanted to establish: (i) the possible exit points from the college program from which the student could be granted some credit by the university; (ii) the maximum number of credits which could be granted upon entry to the university program; and (iii) the requirements that the student must meet in order to receive the maximum number of university credits. With one or two exceptions, the exit point for movement from a college to a university program is after the *successful completion* of a college program, be it a two or three-year program. From the 24 responses to this section of the questionnaire, 11 of the university programs required the student to have successfully completed the college program with a "B" average, 3 required a "C" average upon college graduation, 7 simply indicated 'successful completion of college programme,' 1 required a "B+," and 2 did not specify the requirements. As well, in some instances it was also indicated that the students needed to meet specific program requirements at the University.

Due to the incomplete nature of the forms (either incomplete or not completed) vis-a-vis credit transfer (there were 22 completed program questionnaires that could be used for this section of the paper) it is hard to reach rigourous general conclusions about the maximum number of university credits which could be granted upon entry to a university program. However, enough of the forms were completed to allow us to make some general observations. Table 4 shows the percentage of credit given for individual transfer arrangements. When we say "credit given," what we mean is the amount of credit given to a transfer student towards a degree program at a university. So, for example, when a student receives 50% credit towards a 4-year university program (say for example a 20-credit degree program), it means that he/she is given credit for 2 years of university (10 of the 20 credits required) and enters into third year and must complete third and fourth year (that is, complete the remaining 10 credits) to receive his/her degree. The amount of credit given ranges from a low of 5% (Social Service Worker transfer from Fanshawe College to the University of Western Ontario) to a high of 83% (Physiotherapy and Occupational Therapy transfer from Mohawk College to McMaster University). Under these arrangements, a student completing a 3-year college program generally receives credit equivalent to completion of 50 to 75% of a 4-year university program; a student completing a 2-year college program generally receives 2 years of university credit if entering a 4-year university program and 1 year of credit if entering a 3-year university program.

As Table 1 indicated, there are only four "Joint-D" arrangements in the college system: Mohawk has an arrangement with McMaster for Occupational Therapy and Physiotherapy; Sault has an arrangement with Lake Superior State University for Business Management — Hospitality; Seneca has an arrangement with York University for Early Childhood Education; and Sheridan has an arrangement with Erindale College (U of T) in Art and Art History. All of the arrangements lead to students being awarded, upon successful completion of the program, both a Diploma by the college and a Degree by the university. For those students enrolled in a program with the potential for a "Joint-D" offering, all four colleges indicated that students not intending to seek university credentials were not subject to different admission requirements from those seeking university credentials. All four also indicated that new course offerings have been developed as part of their program arrangements.

Table 4

Percentage of Credit Given Toward University Degree

Program	College/Univ.	Type of degree	% of degree for which credit given	Following completion of
Automotive Marketing	Georgian/Northwood	4-yr. BA	75%	3-yr college prog.
Business Administration	Lambton/Windsor	4-yr.	38%	3-yr college prog.
	Niagara/Brock	n.a.	n.a.	n.a.
	Sault/LSSU	4-yr. BSc	50%	2-yr college prog.
Civil Aviation	Georgian/U of N. Dakota	4-yr BSc	67%	3-yr college prog.
Correctional Worker	Algonquin/Carleton	n.a.	n.a.	n.a.
Early Childhood Ed.	Fanshawe/Windsor	n.a.	n.a.	n.a.
	Lambton/Brock	BA	36%	2-yr college prog.
	Lambton/Brock	BA/BEd	59%	2-yr college prog.
	Niagara/Brock	BA/BEd	25%	2-yr college prog.
	St. Clair/Windsor	3-yr. BA	33%	2-yr college prog.
Fine Art	Fanshawe/Windsor	n.a.	n.a.	n.a.
General Arts & Science	Centennial/York	n.a.	n.a.	n.a.
	Lambton/Windsor	3-yr	33%	2-yr college prog.
	Sault/LSSU	4-yr BSc	50%	2-yr college prog.
Geology	Sault/LSSU	4-yr BSc	50%	2-yr college prog.
Journalism - Print	St. Clair/Windsor	3-yr BA	33%	2-yr college prog.
Nursing	Mohawk/McMaster	3-yr BA	13%	2.5/3-yr college prog.
	Mohawk/McMaster	4-yr BScN	19%	2.5/3-yr college prog.
	Sault/LSSU	4-yr BSc	50% (with grade 13)	3-yr college prog.
	Sault/LSSU	4-yr BSc	38% (with grade 12)	3-yr college prog.
Physiotherapy and Occupational Therapy	Mohawk/McMaster	4-yr BSc	83%	33-month college program
Pulp & Paper Eng. Tech.	Sault/Western Michigan	4-yr BSc	75%	3-yr college prog.
Social Service Worker	Fanshawe/Western Ontario	4-yr BSw	5%	2-yr college prog.

n.a. - figures not available
LSSU - Lake Superior State University

The colleges however responded differently when asked how the course offerings were being provided. In the Mohawk-McMaster and Seneca-York programs, some college courses must be successfully completed first; thereafter, both college and university courses are taken at the same time; in the Sault-Lake Superior State University program, college courses are completed first, followed by university courses; and, in the Sheridan-Erindale program, college and university courses are taken at the same time. Table 5 shows the

percentage of the program taught by college and university faculty, and the percentage of the program instruction located at the college and the university. On average 45% of the "Joint" programs are taught by college faculty and 55% by university faculty. On average, 45% of the program instruction occurs at the college, 48% at the university, and 7% elsewhere.

Table 5

College/University	% of Program taught by: College/University faculty	% of program instruction occurring at: College/University
Mohawk/McMaster	60/40	60/10/30 (elsewhere)
Sault/Lake Superior State	50/50	50/50
Seneca/York	30/70	30/70
Sheridan/Erindale	40/60	40/60

Table 6 shows how prospective students were informed of the transfer arrangements for their college program. As the results indicate, 'Discussions with College Admissions Officer and/or College Faculty' was the method used most often. This response along with the high ranking of 'College Calendar' would seem to indicate that prospective students are potentially well informed as to whether transfer arrangements exist in their field of study and how they operate. This conclusion is reinforced by the high ranking of the 'Other' category. In the "Other" responses it was indicated that students were informed through special program brochures and at orientation sessions for new students to the college.

Table 6
Method Used to Inform Students of Arrangement

Students informed of arrangements by:	% of programs for which method used
College Calendar	81.8
Discussions With College Admissions Officer and/or College Faculty	90.9
Discussions With High-School Teachers and/or Guidance Counsellors	59.1
Through Discussions with University	40.9
Other	59.1

(b) Reasons for Developing Arrangements:

Table 7 looks at the major reasons for developing arrangements with a university for a particular college program. The two reasons most frequently cited for developing arrangements were: (i) arrangements with universities made college programs more attractive to potential students and therefore, were seen as a means of increasing enrolment; and, as such, the increased number of arrangements in this decade may in part be the result of the 'plateauing' of enrolment in the college system, and arrangements may represent some way of lessening the competition among colleges and universities for the same students; and, (ii) arrangements between the colleges and the universities were seen as a means for enabling each institution to contribute what it does best to the education and training of students; transfer arrangements are one way of integrating the two learning styles and systems of the colleges and the universities, that is, mixing more skill-specific training with theoretical training.

One of the 'Other' reasons given by a number of different colleges was that students who did not have the grades to be accepted into university after high school could be accepted into university based on a

successful college career. In some ways this is almost similar to one of the roles of the junior colleges in the American post-secondary school system. Another related 'Other' response, given with some frequency, was that, after attending college for a year, some students determined that university was where they would like to be, and transfer arrangements allowed them to receive some credit for the time they had spent at a college.

Table 7
Reasons for Developing Arrangements

Reason	% of time chosen as a major reason
Students in this college program were finding opportunities for career advancement limited without some university training or university credentials.	34.6
College students expressed interest in having access to more theoretical training, although interest is not necessarily based on concerns about career advancement.	30.8
Limited space in early year(s) of related university program resulted in the university wanting to be able to recruit college students into higher years of the university program.	26.9
Arrangements with the university make the college program more attractive to potential students, and thus arrangements are seen as a means for increasing enrolments in this college program.	50.0
Arrangements were seen as a means for developing greater respect by employers and students for the academic standards of the college program.	26.9
Arrangements between the college and university were seen as a means for enabling each institution to contribute what it does best to the education and training of students.	50.0
Other	57.7

(c) Impact of Arrangements on the College

Section 5 of Form B asked if the arrangements had led to , or required, changes in the nature of the college program. None of the respondents answered that the development of arrangements had led to changes in the admission requirements to the college program. Part (ii) of Section 5 asked if the arrangements had led to changes in the content or mode of delivery of the college program; for example, in terms of more theoretical content, more emphasis on certain subjects, changes in the textbooks used, and more emphasis on classroom instruction, less on laboratory work. While most of the respondents answered "no", a few did note some change: more emphasis was placed on 'thinking' and 'communication' skills; and some course changes were necessary to meet the more general educational requirements of university. It was next asked if the arrangements had led to any changes in the type of college faculty involved in the program, especially in terms of the academic qualifications of faculty. The returned questionnaires indicated, in total agreement with one another, that the arrangements had had no impact on the college faculty involved in the programs. Part (iv) inquired as to whether there had been any changes in the annual per student operating expenditures in the programs involved. Once again, all but one returned questionnaire responded in the negative. Sheridan College's Art and Art History arrangement with the U of T's Erindale College appears to have resulted in increased per student operating expenditures due to the requirement of lower student/teacher ratio at senior-level studio courses. There was no indication as to the approximate percentage increase in annual expenditures per student, however. The colleges were next asked if the arrangements had resulted in any changes in the educational background of incoming students. All those who responded answered that there has been no changes, with the exception of Niagara College. Niagara has found that more students are obtaining their Grade 13 diploma before entering the Early Childhood

Education program. While it's hard to know if there is any direct relationship between the introduction of the transfer program and more students entering this program with Grade 13, there may in fact be some relationship between the two if students are perceiving that they would be more successful in a college-university transfer program if they had an extra year of high school. The colleges reported that there has been no changes in their college programme's attrition and graduation rates due to transfer arrangements.

Finally, the questionnaire inquired as to whether there has been changes in students' and/or employers' perception of the college program and faculty involved in the program. Most responded that there has not been any changes in people's perception of the college program or the faculty, but three colleges felt that such arrangements have had an impact: one responded that the transfer nursing program has led to students and faculty getting greater recognition and credibility [although from whom they did not say]; a second felt that students were "particularly happy" to have an opportunity to attend university; and, a third was using its programme's arrangement as a marketing strategy for the program, presumably thinking that the arrangement will somehow make the program more appealing to students and their potential employers.

(d) Policy Considerations

Section 7 of Form B asked , via a number of questions, for policy implications. The Colleges were also asked to reflect upon their arrangements, and describe any advantages/disadvantages. As might be expected, the advantages far out-weighed the disadvantages. It was commonly agreed that such arrangements provided one more opportunity for graduating students, especially by enhancing their career options. It was suggested by a number of colleges that such arrangements have helped in recruiting potential students by having degree options. It was felt that spending some time at a community college allowed students to develop the grades, confidence, or maturity needed for university. Finally, it was suggested that such arrangements provide more economical access to university for local students. The disadvantages were often more of a technical nature; that is, working with two different systems vis-a-vis registrars, timetables, etc. One college felt that there was some pressure to increase general education courses at the college level; and it was also suggested that arrangements of this type tended to promote "elitism" by no longer serving the level of client-group that the college system was originally set up for.

While there was general agreement that the college system should attempt to increase the number of arrangements with the university system, there was less agreement as to whether these arrangements should be system-wide or more faculty/program-specific. One college felt that transfer arrangements were better suited to three-year college programs because these programs are generally more consistent with university education. Another felt that colleges must never lose sight of their mandate to provide those interested with relevant career training that allows for successfully finding employment. It was suggested that "transferability" should be a second priority to that of relevant career-oriented education and training. Another college echoed these sentiments by suggesting that colleges and universities have different mandates and only when those mandates intersect should arrangements be made. When the nature of the discipline, the nature of the institution and its resources, and the requirements of the job market provide common ground between the two types of institutions, then arrangements may provide maximum opportunity to the community, and in these fields transfer arrangements should be established.

III. Other Types of Arrangements

The results of this section were tabulated from Form C and from the calendars of Ontario's universities. While Forms A and B asked colleges to provide information on any existing arrangements between themselves and universities in terms of either college-to-university student transfers or the joint provision of programs by the college and a university, Form C was intended to collect information on other types of arrangements colleges may have with a university. The university calendars were looked at to see if there were any general policies for admitting community college graduates.

Form C specifically asked three questions. The first question asked whether a college has credit transfer arrangements for university students. Only six of the respondents indicated that they had any type of arrangement for the granting of credits to university students. Mohawk, Sault, and St Lawrence Colleges have an informal policy whereby university students and/or graduates may apply and their cases are assessed on an individual basis and credit is given accordingly. Algonquin has an unofficial policy whereby students with a B.A. may obtain credit for equivalent college courses. More specifically at Algonquin, the School of Health Sciences gives credit for equivalent courses to applicants to this program. Centennial College has a "College Advanced Standing Policy" whereby students can transfer up to 50% of their credits to a diploma program. St. Clair College has arrangements whereby university students are granted advanced standing toward the Early Childhood Education Program and the Medical Laboratory Technology Program. As well, at St. Clair, students may enter into the journalism program with a B.A., and the required number of courses required for the program is negotiated on a student-by-student basis.

The second question asked in Form C was whether arrangements exist for the sharing of space, specialized facilities, or equipment. Ten of the colleges responded that they have either rented space to or from universities: Algonquin's Chemical Engineering Technology program rents chemistry laboratory space from the University of Ottawa, and their Correctional Worker program has an arrangement with Carleton University for the use of the library and films; Canadore has extensive facility sharing with Nipissing University College in the following areas: plant and property, shipping and receiving, health centre, cafeteria, library, switchboard and telephones, gymnasium, lecture theatre, campus shop, and student residences; York University offers courses at Georgian Colleges' Barrie and Orillia campuses; Lambton College has, in the past, rented classroom space to the University of Western Ontario and the University of Windsor; the University of Ottawa has made an arrangement with the local chapter of the R.N.A.O. to offer their baccalaureate-level nursing courses at Loyalist College; Mohawk College shares with McMaster University a downtown Hamilton Information/Teaching Centre, where they share the operating costs; as well, Mohawk rents time in McMaster's biology laboratory, and McMaster and other universities have rented classroom space for night courses; Sault College provides space for courses in Lake Superior State University's MBA program and law courses. As of September, 1989, Trent University will be offering four courses at Sir Sandford Fleming's Frost Campus, and this will entail the use of classrooms, the library, access to the bookstore, and the use of audio-visual equipment. The University of Windsor shares the facilities of St. Clair's Thames Campus in Chatham. The University of Ottawa uses classroom space and facilities at St. Lawrence's Cornwall Campus; it also teaches via teleconference at the Brockville Campus and rents space and keeps electronic equipment on site. At St. Lawrence College, the Civil Engineering Technology program rents use of the 'asphalt lab' and the 'hydraulics lab' at Queen's University; and the Cook Apprentice program has rented space at Queen's kitchen facilities.

The third question asked was whether the colleges have arrangements for the preservice or inservice education of college staff by or through a university. Five colleges responded to having some form of educational arrangements. Cambrian College reports having collaborative professional development activities in the field of distance education. Lambton reports that the Master of Education program is offered on campus by Central Michigan University. At Sault College, Michigan State University offers some courses at the M.A. and Ph.D levels; and some faculty and administrators have completed undergraduate and graduate degrees at both Lake Superior State University and Michigan State University. As well, several joint training sessions for managers are held at both Lake Superior State University and Sault College. Seneca reports that the Master of Education program is offered for their college staff at Brock University. Finally, at Humber College, Central Michigan University offers courses towards the Master's degree, and York University offers courses towards undergraduate degrees. These courses are available for anybody to take; that is, they are not exclusively for the education of Humber's staff. At one point, OISE offered courses towards the Master of Education degree at Humber. And, Humber is presently discussing with Michigan State University the possibility of having them offer courses towards the Ph.D. at Humber's campus.

Table 8 details the amount of credit given to CAAT students when they transfer to one of the universities in Ontario (these are general criteria which are described in the individual university calendars). As can be seen from the table, most universities require the applicants to have cumulative

averages that range from "C" to "B," to as high as "A." The maximum credit given towards a university degree is 5 (the equivalent of one year of university), and this generally requires successful ("B" average) completion of a 3-year college diploma program. If the applicants do not meet the individual requirements, their applications are considered on an individual case-by-case basis. As one might expect, a comparison with the specific program arrangements indicates that they lead to a greater possibility of credit than the general university policies.

In addition to the information in Table 8, Lakehead University has a province-wide general policy for the transfer of college credits, and, as such, the colleges did not have to negotiate individual arrangements. Students who graduate from a community college with a three-year diploma with grades of 70% or better may apply for entrance into a similar degree program at Lakehead and may be given credit amounting to approximately two years of university work. In addition, community college graduates from a three-year Business Administration Program with a "B" average in business subjects (three-year cumulative average) may apply for admission to the Bachelor of Administration Degree Program. They will be required to complete a minimum of five full courses. Also applicants who have completed an accredited two-year Forestry Diploma, with a minimum "B" overall average, are eligible for admission consideration to second year of the Honours Bachelor of Science Forestry Degree Program.

Laurentian University has one system-wide, program-specific, transfer agreement: applicants who have successfully completed the Diploma Program in Early Childhood Education or in Child Care Worker with a grade point average of 3.2 or better will be considered for advanced standing, to a maximum of 5 full courses.

Table 8
Credit Given by Universities

University	Requirements to be met by college students for university admission	Maximum credit given toward degree
Brock	- from a 3-yr program with cumulative "B"	-5 credits (one year)
	-from a 2-yr program with cumulative "B"	- 3 credits
	- from a 1-yr diploma program with cumulative "A"	- no transfer credit awarded
Carleton	- applicants with an over-all 2nd class standing, or who have 2nd class standing in last 2 semesters of a 3-yr program	- 5 credits (one year)
	- applicants with over-all 2nd class standing, or 2nd class in last 2 semesters of 2-yr program	- considered for admission, no advanced standing received
	- those with 2 yrs of a 3-yr program with 2nd class standing	- considered for admission, no advanced standing received
	- those with 1-yr of a 3-yr program with 1st class standing	- considered for admission, no advanced standing received
Laurentian	- applicants with cumulative 66%, or who have cumulative 66% in last 2 semesters of a 3-yr program	- 5 credits (one year)
	- graduates of 2-yr program, or 2 yrs of a 3-yr program, with cumulative 66% or 66% in last 2 semesters	- considered for admission, no advanced standing received
	- graduate of 2-yr program with 80% average in last 2 semesters	- 3 courses

	- completed 1st-yr of a program with cumulative 80%	- considered for admission to 1st-yr on probation, must pass 4 or first 5 courses to clear probation status
McMaster	- graduate of a 3-yr program	- "at least One level"
	- completed 2 yrs	- "at least 12 units"
	- completed 1-yr of work	- considered individually
Queen's	- completed 3-yr program	- 5 credits
	- completed 2-yr program, or 2 yrs of 3-yr program	- considered for admission to 1st-yr of a degree program
	- completed 1-yr program, or 1-yr of a 2 or 3-yr program	- not eligible for consideration to 1st-yr university unless they have also completed final academic secondary school year
Trent	- satisfactory standing in appropriate 3-yr program	- 5 credits
U of Guelph	- grads of a 2-yr program, or those with 2 yrs of a 3-yr program	- considered for admission to the 1st semester of a corresponding program
U of Ottawa	- completed a 3-yr program with a minimum average of "C"	- admitted with advanced standing for up to 1-yr of studies
	- completed 2 yrs of a program with a minimum average of "C"	- may be admitted to 1st yr, but no advanced standing granted
U of Waterloo	- those with 1st class honours or high 2nd class honours in each-yr of a 3-yr program	- 1 yrs credit of a degree program
	- completed 2 yrs with 1st class honours or high 2nd class honours	- considered for admission to 1st yr
U of Western Ontario	- completed a 3-yr program with a cumulative"B" or have a "B" in the last 2 semesters of a 3-yr program	- 5 courses
	- completed a 2 or 3-yr program with cumulative "C+", or have "C+" in last 2 semesters of such programs	- considered for admission to 1st yr
	- completed a 3-yr technology program with cumulative "A" and wishing admission to Engineering Science	- may be granted advanced standing on the recommendation of the Faculty of Engineering Science for a maximum of 9 courses
U of Windsor	- graduated from 3-yr program with cumulative "B"	- considered for admission to 2nd yr
	- completed 2 yrs of 3-yr program with cumulative "B"	- considered for admission to 1st yr
	- graduated from 2-yr program with cumulative "B"	- considered for admission to 1st yr
Wilfrid Laurier	- applicants with cumulative "B", or "B" in last 2 semesters of a 3-yr program	- 5 courses (1 year)
	- applicants with cumulative "B", or "B" in the last 2 semesters of a 2-yr program	- considered for admission to 1st year
	- completed 2 yrs of a 3-yr program with cumulative "B" in last 2 semesters	- considered for admission to 1st year

	- completed 1st-yr of a program with cumulative "A"	- considered for admission to 1st year
York	- those who have completed 1, 2 or 3 yrs of a program with: (i) completed 4 full-yr or 8 semestered courses considered by York to be of an academic nature; (ii) achieved overall "B" average; (iii) achieved an average in academic subjects of at least "B"	- considered for admission to a 1st yr program
	- completed 2 semesters of a diploma program	- eligible for advanced standing, to be determined by Faculty concerned

Laurentian also has an agreement for applicants who wish admission to the School of Engineering (Mining and Extractive Metallurgical Engineering Programs) and have completed a 3-year program in Mining Technology from the Haileybury School of Mines or the Mining and Geological Engineering Technology Program at Cambrian College. They will be considered for admission with advanced standing to a maximum of 7 courses; applicants who have completed 1 year of the above programs from Haileybury or Cambrian will be considered for admission, on probation, and without any advanced standing.

IV. Summary and Conclusion

When the system of Colleges of Applied Arts and Technology (CAATs) was established, a distinct division of labour between the colleges and the universities was a matter of deliberate policy. However, the development of college-university linkages was not totally ruled out. When then-education-minister Bill Davis was announcing the establishment of the CAAT system in 1965, he stated:

> ...I have no doubt that where circumstances warrant it, some of our universities will make arrangements with particular colleges of applied arts and technology, as provided in the proposed legislation, to conduct one or two years of their own degree courses within those colleges.

As we have seen, most existing arrangements were developed in the 1980s. In the intervening 24 years between the establishment of the CAAT system and today, educational mandates and student-employer needs have changed. And while there will always be a need for a distinct and unique role for the colleges within the Ontario educational spectrum, it is also true that an evolving society is demanding that students acquire more hybrid skills (a combination of multi-skills and knowledge-based, organizational, and communicative skills). To meet these new needs, the distinction between the colleges and the universities may need to be blurred in some instances. The Council of Universities task force "Universities into the 21st Century" has suggested:

> While the university and college systems have operated independent of one another, this may no longer be appropriate in the future. If we are to provide opportunities for our citizens to develop to their full potential, then it may be time to remove the barriers between the various partners in the higher education enterprises and replace them with stepping stones. We do not, as yet have a sufficiently flexible system of higher education within the province which acknowledges the value of different kinds of educational experiences.

The arrangements outlined in this paper are an attempt to overcome this deficiency and facilitate yet one more opportunity to provide "sufficient and sufficiently" well trained graduates in certain fields in order to meet the changing needs of the economy. As the results of Table 6 show, of those who responded to the question as to the reasons for developing arrangements, 50% answered that 'arrangements were seen as a means for enabling each institution to contribute what it does best to the education and training of students.'

As shown in Tables 2 and 3, most of the program arrangements have been in areas that could be classified more as 'liberal arts,' and those that feed the service sector. But the rise of knowledge-based capitalism, the information age, and the increasingly rapid pace of technological change also suggest the need for arrangements in the area of what might be referred to as "advanced" technical studies (for example, electrical engineering technology). It may be prudent for future arrangements to be established in this area.

In addition to the 27 arrangements identified in Table 1, there are a number of arrangements being negotiated or about to be implemented: Centennial is currently discussing with York University the development of a number of joint programs; Conestoga College, in recognition of a need for formal linkages in its geographical area, has set up a meeting for the fall of 1989 with the University of Waterloo, Wilfrid Laurier University, the University of Guelph, McMaster University, and Mohawk College to discuss the transfer of credits, partnerships, the sharing of space and facilities, and development opportunities; Georgian College is discussing with the University of Toronto the possibility of offering additional qualification in the "art" area; Georgian is also discussing with the University of Windsor the idea of offering advanced standing to its Automotive Marketing Business Administration graduates, and it is establishing a transfer arrangement with the University of Guelph for the Creative Arts Program (Design and Visual Arts); and Niagara College is negotiating transfer arrangements with Niagara University (Niagara Falls, New York) in the areas of Business - Accounting and Marketing Management, and is negotiating with the State University of New York the establishment of a transfer arrangement for business - Accounting.

A wide-ranging agreement was signed by Durham College, Ryerson Polytechnical Institute, York University and Trent University in the spring of 1989 that will allow students to transfer among the four schools with recognition of credits. The arrangement is known at the Durham Alliance for Training and Education (D.A.T.E.). The impetus behind the agreement was to broaden the educational opportunities for adults in Durham Region. As there is no university in the Durham area, the agreement will bring a 'university presence' into the region. In essence, the college will act as a broker for the other institutions by providing space for their programs and courses on campus. The programs will operate only for part-time adult students, but it is expected to expand to encompass full-time students sometime in the future. Under the arrangement, Ryerson will offer ten courses related to four degrees, including Early Childhood Education, Information Management, Nursing, and Business. York will offer its Business Management Program, while Trent will offer courses in Arts and Science. A Durham student with a two-year college diploma in Early Childhood Education will receive credit for it towards a four-year degree from Ryerson. And Durham's Business Administration Diploma Program will be linked to York's Business Management Studies. A student will also be able to obtain a four-year Trent Arts Degree at the college. A Ryerson graduate will be able to enrol in a two-year diploma program at Durham, but complete it in less time because of his/her's previous work at Ryerson. Ryerson and the universities will hire their own instructors to teach the degree-related courses.

There has not, of course, been universal agreement on the desirability of college-university arrangements. For example, in a letter from one college to the Council of Regents, concern was expressed about the blurring of the distinction between colleges and universities. It was suggested that: "...it does not appear to be part of the community colleges' mandate to perform as university preparatory institutions. As an alternative to university, the colleges' focus has been toward practical application, whereas the universities' has been toward theoretical concepts." This may be expressing what other colleges and universities have privately felt: a reluctance towards integration. For example universities may be reluctant to grant credit for academic work over which they have no control, and they may wish to have some say over college curriculum and of course some of the colleges would view this as an unwelcome intrusion into their affairs; colleges may feel that arrangements might lead to the imposition of university values and standards and thereby negate the distinctions between the two systems. But it should be recalled that, in Section I Part (iii), the respondents indicated that arrangements had led to relatively few changes in the nature of their programs.

Colleges and the Educational Spectrum

Colleges and Universities

Background Papers

John Dennison
Professor of Higher Education
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College to University — An Analysis of Transfer Credit Policy and Practice

Study Team 5

"Articulation must be recognized as a series of processes, transfer being one of them. No matter how beautiful the paper model, success of the responsibility to serve transfer students is strongly dependent on the support and understanding of faculty and staff of both sending and receiving institutions. The problem is largely people-oriented." (Kintzer and Wattenbarger, 1985, p. 43)

College to University
An Analysis of Transfer Credit Policy and Practice

Summary

The concept of credit transfer between institutions of postsecondary education is a complex issue which has been developed over time within a number of educational jurisdictions. In particular, transfer of credit arrangements between colleges and universities, while common in the United States, have been formalized in Canada only in Alberta and British Columbia, and in a more unique format, in Quebec.

Formal arrangements involve the notion of equivalency of courses with respect to content and quality; the assurance that students who fulfill conditions for course transfers will automatically be awarded credit; and formal agreements by both sending and receiving institutions with respect to both the policies and the practice of transfer arrangements.

In most jurisdictions bodies are established at the provincial/state level which develop and formalize transfer policy. These bodies may be established by the appropriate government department or be created informally through voluntary cooperation of participating institutions.

The question of whether Ontario should move towards formal transfer arrangements between colleges and universities will depend upon which kind of system of postsecondary education is considered as appropriate for the future. If a coordinated, integrated system of colleges and universities is viewed as being most able to respond to the needs of society with respect to student mobility and accumulation of credits, formal transfer arrangements will be necessary.

Several options in the province of Ontario are possible. One is to formalize university credit equivalency for those appropriate academic courses which are currently being offered in the colleges. A second option is to develop articulated programs jointly in colleges and universities whereby students may earn professional credits at various levels. A third option is to create formal transfer programs in colleges, with selected universities, or on a system-wide basis.

In each option both advantages and disadvantages will be seen to exist. The final decision will rest upon the mandate described for Ontario colleges and universities in the year 2000, and the type of structure which best responds to that mandate.

Du Collège à L'Universté

Une Analyse des politques et des pratiques relatives au transfert des étudiants

Sommaire

Le transfert des crédits entre les établissements d'enseignement postsecondaire est une question complexe qui est apparue progressivement à divers endroits. Les ententes portant sur le transfert des crédits, bien que relativement courantes aux États-Unis, n'existent au Canada que dans les provinces de l'Alberta et de la Colombie-Britannique et, dans un format unique, au Québec.

Ces ententes reposent sur le principe de l'équivalence du contenu et de la qualité des cours, sur l'assurance que les étudiants répondant aux critères relatifs à un transfert de cours recevront automatiquement leurs crédits et sur l'accord entre l'établissement de départ et l'établissement d'accueil au sujet des politiques et des pratiques du transfert.

Dans la plupart des endroits, des organismes sont créés au niveau de la province ou de l'État dans le but d'élaborer et de mettre en oeuvre les politiques relatives au transfert. Ces organismes peuvent être mis sur pied par les ministères concernés ou grâce à la collaboration des établissements participants.

La possibilité de conclure de pareilles ententes entre les collèges et les universités en Ontario dépend du type de système d'éducation postsecondaire futur qui sera jugé approprié. Si on en arrive à la conclusion qu'un réseau coordonné et intégré d'établissements collégiaux et universitaires est le plus apte à répondre aux besoins de la société en ce qui concerne la mobilité des étudiants et l'accumulation de crédits, ces ententes seront alors nécessaires.

En Ontario, plusieurs approches peuvent être adoptées. L'une d'entre elles consiste à normaliser les équivalences d'un crédit universitaire pour les cours appropriés qui sont présentement offerts par les collèges. Une autre permettrait la mise sur pied de programmes conjoints entre les collèges et les universités qui donneraient la possibilité aux étudiants d'obtenir des crédits à différents niveaux. Enfin, une troisième approche entraînerait la création de programmes de transferts entre les collèges et certaines, sinon toutes, les universités.

Chaque approche comporte évidemment des avantages et des inconvénients. La décision finale devra refléter le mandat qui sera confié aux collèges et aux universités de l'an 2000 et le type de structure qui en permettra la réalisation.

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I. Introduction

This paper will be both descriptive and analytic. It is intended to focus upon three related topics.

1. The principles which underlie transfer of credit arrangements between colleges and universities and the advantages and disadvantages of such arrangements.
2. An assessment of current practices in Alberta, British Columbia, Quebec, and the United States as appropriate models of transfer practice which Ontario might consider.
3. Options which the Province of Ontario might adopt in creating transfer arrangements and the implications arising from such a decision.

It is important to note that, while this report will focus largely upon transfer arrangements as applied to students transferring from college to university, this pathway represents only one form of transfer. Current practices in most jurisdictions involve large numbers of students who transfer from universities to colleges, from private colleges to universities, from colleges to other colleges, and from universities to other universities. In addition, students move from province to province, often with advanced credit towards credentials and degrees. While each of these forms of transfer involves unique elements, there are principles which are common and hence underlie the entire concept of "transfer with credit."

As noted previously, however, this paper will concentrate upon the issue of whether transfer arrangements should be explored between Ontario's seventeen universities and its twenty three colleges of applied arts and technology.

II. Some Dimensions of Credit Transfer Arrangements

1. A Legal or Quasi Legal Agreement

A credit transfer policy may be called an articulation agreement whereby students in one institution may earn credits towards a credential in another, which are then "cashed" after transfer. Unlike an "ad hoc" situation whereby a student submits his transcript to the receiving institution and "hopes for the best," a credit transfer policy involves the establishment of the course content, conditions and standards of transfer before students undertake their first courses at the "sending" institution. Credits are subsequently honored without further debate.

As will be described later in this paper, the extent of formality in transfer agreements may vary from a legal or legislated policy to one in which individual institutions make independent agreements with one another.

Much of the "power" in transfer agreements lies with the receiving institutions, usually universities, and while in the United States universities have relinquished some autonomy in several states, university autonomy in such matters is very much within the Canadian tradition. In British Columbia such autonomy is firmly in place; in Alberta universities have major input into province-wide committees charged with formalizing transfer arrangements; while in Quebec the issue is not strictly relevant.

Given the nature of the academic enterprise in Canada it is unlikely that transfer agreements will be legalized. However, with goodwill and a determination to act in the best interests of students, "quasi-legal" agreements are possible and practical.

2. Equivalency as a Condition for Transfer Credit

In general terms, a course which is accepted for credit on transfer falls into one of the following categories.

a. It is granted equivalency, i.e., Math 104 is equivalent to Math 105.

b. It is awarded credit as unspecified course equivalency in a particular department, i.e., Maths 104 is granted 3 credits of junior level (1st and 2nd year) mathematics.

c. It is awarded specified general credit in a baccalaureate degree program, i.e., Maths 104 is granted 3 units at junior level in the Faculty of Science (or Arts or Education or Commerce).

It is the first category which has the potential to create most difficulties. What does equivalency really mean?

Some colleges have expressed concern that the university interprets "equivalency" to mean "identical," and consequently insists that the course outlines, hours of instruction, textbooks, and examinations be the same as in the university. This policy, particularly when coupled with a requirement that the college instructors submit academic credentials, causes some resentment in college circles.

The position taken by most colleges and some other observers is that equivalency is not the same as identical and the real measure is student learning in a somewhat broader sense. The acceptance of the latter concept provides for wider flexibility in course curricula, text books, and measures of achievement.

3. The Meanings of "University Transfer" Courses

Largely because of long standing practice in the United States, Canadian colleges which offer these courses consistently refer to them as "university transfer" courses for a variety of reasons, only one of which being to proceed to university. To perpetuate the myth that university is the goal of all students taking such courses does a disservice to both the students and the college.

For the students the expectation of transfer to university leads to a mistaken belief that somehow students who do not transfer have failed to attain their goals. For the college there is also a serious consequence. Government personnel and others tend to judge the success of the program by its results, e.g., in evaluating vocational technical programs, job placement is a primary measure of success. By applying the same yardstick to "university transfer" programs a relatively low transfer rate created an ill-founded concern that these programs are somehow unsuccessful.

In reality, "university transfer" courses (or, as they should be called, "academic" or "liberal studies," or "general education courses) provide students with a wide range of opportunities. Burton Clark (1960) once referred to the "cooling out" function of the community college, by which students come to realistic terms with their abilities and adjust their education goals accordingly. With such an understanding, attrition rates, inter-program transfers, withdrawals, and readmissions are all expected consequences from students who have reassessed their abilities or attitudes towards academic study.

The Dennison Forrester-Jones (1982) studies reveal the range of purposes expressed by students for taking academic programs, not the least being the desire to take courses for personal development. Community colleges which provide such opportunities make a significant contribution to the quality of life in their regions.

It is the view of this writer that academic courses are important ingredients in college curricula, irrespective of the transfer-to-university function, and have a legitimacy in their own right.

4. The Roles of the Sending and Recruiting Institutions Transfer Policy

Under transfer agreements, each party, the college and the university, has important roles to play if the process is to succeed and student interests are to be served. It is not a junior-senior or master-servant relationship.

The responsibility of the college or sending institution is to be sensitive to the fact that the universities are awarding credit towards their own degrees while having limited control over what occurs in the colleges. Hence, the colleges must supply sufficient information to assure the university that reasonable course equivalency will be maintained. It is also incumbent upon colleges to monitor the results of their transfer students' achievement in specific university courses and programs so as to implement changes if indicated.

On the other hand, the universities must be cognizant of the difficulties colleges face in providing extensive library and laboratory spaces, attracting high profile scholars as course instructors, and specializing to the extent possible in major universities.

Further, universities must recognize the confusion and uncertainty in colleges which will follow changes in policies and procedures regarding transfer credit. They must honor their commitments to the colleges, irrespective of changes in department heads, etc.

Policies and procedures regarding transfer credit must be written and widely circulated. Informal agreements generally lead to confusion and conflict.

5. Course by Course or Block Transfer?

As will be reported in the following pages, the practice in Canadian jurisdictions regarding credit transfer arrangements is for universities to award credit on a course by course basis. Individual student transcripts are evaluated accordingly. In several states in the U.S. the policy is much broader. Universities give block credit for the first and second years of a baccalaureate program for the Associate in Arts degree from accredited community colleges. The AA degree will normally include both general education credits and pre-requisites for specific professional programs at the university. This arrangement will be described in more detail in the section on the United States.

Why is block transfer not used in Canada? The reason is rooted primarily in the jurisdictional autonomy of the universities' academic departments. The latter are selective in the courses they recognize, whether they be for course equivalency or general credit.

From the college point of view it would be of significant advantage to enshrine a block transfer policy. Colleges could then develop courses under the "general education" rubric which would reflect community interests or faculty specialities. The restrictions placed upon curriculum innovation by the universities would be effectively eliminated.

While block transfer is not imminent in Canadian jurisdictions it seems inevitable that increased maturity and "political" know-how in the college sector will generate a move in that direction. In a system of equal partners in the education enterprise block transfer is both realistic and desirable.

III. Descriptions of Arrangements in Other Jurisdictions

1. The United States

While articulation policies and practices exist between institutions of higher education in virtually all of the fifty states, it would be accurate to argue that no two states are identical. Much of the variation is rooted in the history of development of postsecondary education in each state, particularly with reference to the traditional role of two year community colleges, and the degree to which the legislature has intervened in policy matters related to the higher education system.

An excellent historic reference to articulation in higher education has been provided by Kintzer (1973) and much of what follows may be attributed to that source.

Prior to 1960, articulation between colleges and universities in the various states had been a one way process, with the senior institutions setting the terms and conditions. In states where college movements were well established, e.g., California, Illinois, Texas and Washington, the large numbers of transfer students ensured that some efforts at coordinated planning were taken.

In the early sixties, however, rapid expansion of places in post high school programs led to a dramatic increase in the number of two year colleges and a need to create better alternatives to the ad hoc arrangements which had often been the norm. At the same time, a major study (Knoell and Medsker, 1965) led to recommendations designed to alleviate the frustrations faced by colleges and college students in matters of credit transfer. *Inter alia*, the notion of "equivalency," as distinct from "parallelism" in college and university courses, surfaced in the report.

During the next decade articulation agreements were hammered out in almost all fifty states, each agreement having both common and individual characteristics, and each designed to protect the integrity of participating institutions while providing fair and predictable treatment for students in the matter of transfer of course credits.

In general terms, articulation agreements fall into three categories or models, i.e., Formal and Legal Policies; State System Policies; and Voluntary Agreements. A brief description of each model follows.

Formal and legal policies:

Initially developed in Florida, such policies involve the intrusion of formal bodies such as State Boards, Coordinating Commissions, or Councils of Higher Education, in which the primary activity is *coordination* rather than *control*. In this approach all levels of the higher education system are involved in designing policies which are then honored by all parties. In Florida, for example, policies apply to general education agreements and to the Associate in Arts degrees. Georgia established a core curriculum formula which would apply to the first two years of the baccalaureate degree in all public institutions.

The only *legally mandated* articulation agreement was in Illinois where guidelines for transfer of credit flowed from the appropriate sections in the Junior College Act.

State system policies:

In states which utilize this model the key authority is the state body responsible for community college education, and *control* rather than *coordination* is the norm. Boards of Community Colleges (or Higher Education) establish clear conditions for transfer, may approve programs and/or courses of instruction, may

set general education and associate degree requirements, and may monitor and settle disputes between institutions.

In some states (e.g., Hawaii, Kentucky, Nevada) public universities and community colleges operate under a single Board of Regents, which ensures formality in articulation arrangements applicable to all levels of the system.

In states such as those noted above "Master Plans" are often prepared which clarify the roles of each element in the system.

By way of example, it is interesting to note a situation in Washington where individual institutional autonomy in matters of transfer credit has been long recognized. The State Council on Higher Education initiated the preparation of guidelines for the Associate of Arts degree for adoption by all institutions. The guidelines appear as follows:

> The associate of arts degree (sometimes called the associate of arts and science degree) is defined in the commission report as that two-year degree offered by the community college to students who have completed the transfer curricula. So that it may be used to fulfill general education requirements for a baccalaureate degree, the associate of arts degree should possess specific characteristics. It should include ninety quarter hours of transferable credit and be issued only to students who have earned a cumulative grade point average of at least 2.0. The degree should allow for completion of approximately two-thirds of the required credits (sixty quarter credits) in general education (also called general university requirements, distribution requirements, breadth requirements) with a reasonable distribution among communication skills, humanities, social sciences, and natural sciences. The associate of arts degree should permit completion of approximately one-half of the unprescribed elective credits in any college courses that the community college will approve for credit toward the associate of arts degree.
>
> An associate of arts agreement applies to general education. Students who transfer within this agreement must still meet lower division requirements in the major, minor, and professional programs.
>
> Institutions developing mutual agreements must clearly identify degree titles, effective dates, and other specifics to provide clarity for students and advisers and to aid in transcript evaluation. The commission report charts general arts and sciences degree requirements of all public and most private senior colleges and universities. A maximum of one-half the credits required to earn a baccalaureate degree are transferable from two-year colleges. This figure ranges from ninety to ninety-six quarter hours. Each senior institution in the state allows for exceptions if warranted.
>
> The Council on Higher Education has established priorities for admission of transfer students, giving first preference to community college graduates and last to those with less than two years in a two-year college.

Voluntary agreements among institutions:

This articulation model emphasizes voluntary cooperation and negotiation between institutions, rather than unilateral formalization. (As will be noted later, this particular approach is characteristic of the practices in British Columbia and Alberta. It has most of the advantages and disadvantages which will be found in all constituencies).

In this model discipline-based committees in colleges and universities develop arrangements for credit transfer which apply to students who transfer from one institution to another. Each university may set its

own conditions with each individual college and students submit transcripts which provide a basis for transfer credit. The strength lies in recognition of institutional autonomy in such matters, but policies are subject to changes in institutional leadership and formal enforcement is difficult.

The most notable example of the particular model is to be found in California which has a long history of community college development and has placed considerable emphasis upon master planning.

Information contained in community college calendars demonstrates how voluntary agreements apply. Courses acceptable for credit transfer to all campuses of the University of California are listed. Further courses which apply specifically to individual campuses are also shown. A similar situation exists with respect to the California State University and its many campuses.

Concluding comment

The primary mission of the two year college in the United States (or as it was originally named, the junior college) was to provide general university equivalent education at the levels of years 13 and 14 for those students intending to continue to a baccalaureate degree in a four year college or university. Indeed, this function has dominated the literature on college issues for most of the first half century of their existence (Medsker 1960, Thornton 1966, Medsker and Tillery 1971, Kintzer 1967, Koos 1970, Monroe 1972, Reynolds 1969).

Nevertheless, in recent years the transfer function has attracted less and less attention in the literature as *junior* colleges have become *community* colleges. At the same time the technical-vocational, community education, upgrading, and lifelong learning aspects of the curriculum have become increasingly important.

California is a case in point. Since Proposition 13 (which limited tax allocations to education) and Proposition 98 (which limited the amount of state revenues to community colleges), the colleges in that state have been forced to expand more economically viable operations at the expense of transfer courses. In a recent conversation with Dr. Lyman Glenny, it was noted that the number of college transfer students at the University of California had increased by only about 1000 since 1954, while the number of community college students in the state had risen from 300,000 to 1.2 million during the same period.

The significance of the transfer issue in California is also related to current trends in the ethnic background of college students in that state. By 1991 white Caucasian students will form a minority in colleges, and the needs of Asian and other new ethnic groups are more closely identified with language acquisition and upgrading of skills necessary to qualify for the workforce rather than the attainment of baccalaureate degrees.

Warren (1985) provides further evidence of the trend in California colleges. He notes that from 1974-82 only about 10 to 12 percent of students entered the college directly from high school and while there formed the pool from which the majority of transfers to university flowed. The great majority of college students are adults with less probability of seeking a baccalaureate degree.

Nationwide, the transfer rates of community college students vary, according to a number of reports. Friedlander (1980) claims that typically fewer than 10 percent of students actually transfer. Earlier studies reported by Eckland and Henderson (1981) indicate a rate of one in four, while Alba and Lavin (1981) report that 40 percent of the students entering the City University of New York in 1970 transferred within five years.

Much of the difficulty in obtaining accurate figures on transfer rates lies in the classification of "university transfer" students, their status as part-time or full-time, and the erratic enrollment patterns which characterize college students' behavior.

Despite the generally accepted view that only a minority of transfer students actually transfer, their performance at university is reported in favorable terms. The Knoell Medsker study indicates that over 70 percent earn their degrees, although not necessarily "on time". Many experience an initial drop in grades but improve with time. Those students who transfer after two years in college perform particularly well and rarely withdraw from university. As might be expected, community college GPA is the best single predictor of university performance (Phlegar et al, 1981).

The growth in enrollments in community colleges in the United States has been little short of phenomenal. From 663 institutions and 600,000 students in 1960, there are now more than 1,200 institutions and almost five million students. As noted earlier, the mission and character of community college education has been changing but the original objective of providing alternative access to a university degree program remains a priority.

Indeed, there is evidence of continuing concern over a need to smooth the transfer process and ensure more equitable academic preparation for students, irrespective of the institutions in which they enroll.

A recent reassessment of California's community colleges (*The Challenge of Change*, 1986) paid particular attention to the transfer function and, in doing so, produced a number of recommendations which are of considerable relevancy to the Canadian scene.

The Commission recommends:

> 8. That the Board of Governors, the Regents of the University of California, and the Trustees of the California State University, with appropriate faculty consultation, cooperatively develop and maintain a general education transfer core curriculum which, with the courses required for specific majors, will ensure transfer to the University of California or the State University systems upon successful completion of the appropriate courses and maintenance of the requisite grade point average.
>
> 9. That the Board of Governors communicate the core curriculum to the State Board of Education to be used as part of its curriculum development procedures, so that secondary school students are aware of the requirements for collegiate preparation and transfer and can receive any necessary remediation at the earliest possible opportunity.
>
> 10. That the specific requirements for collegiate preparation and transfer be published jointly by the Board of Governors, the Regents of the University of California, and the Trustees of the California State University, and distributed to all junior high schools, high schools, and community colleges in California, with particular attention to schools with high minority-student populations.
>
> 11. That the Board of Governors redesign both the Associate in Arts (AA) and the Associate in Science (AS) degree requirements to include the transfer core curriculum, courses for specific college majors, and elective requirements. No courses beyond these areas should be required for the AA or AS degrees. Degrees should be awarded upon completion of the core curriculum, major, and elective requirements.
>
> 12. That Community College students who were not eligible for University of California or California State University admission directly from high school be required to complete the transfer core curriculum, within the currently required number of units, prior to transfer. Exceptions could be made for those students with only one or two secondary school course or subject deficiencies.

13. That the Board of Governors invite and encourage the independent four-year institutions to participate in the development of the core curriculum and the efforts to improve the transfer function, and to consider their applicability to their own institutions.

2. British Columbia

History

The comprehensive community college[1] in British Columbia was conceived in the Report of John B. MacDonald (1963), the then newly appointed President of the University of British Columbia.

Reacting to a widely expressed concern over lack of opportunities to participate in post-secondary education for a large percentage of the 18-21 age group in the province at that time, MacDonald proposed the establishment of two additional four year colleges, and a network of two year colleges based in the community. The latter would offer "university transfer" courses equivalent to the first two years of university baccalaureate degrees, and a variety of technical diplomas which reflected the manpower needs of the individual communities.

The changes in legislation in both the Public Schools Act and the Universities Act, which permitted the realization of the MacDonald proposals, contained provisions to ensure the orderly development of the "transfer" courses in the colleges.

The Universities Act provided for the creation of an *Academic Board* composed of two members appointed by the Senate of each University, and three government appointees.

Inter alia, the *Academic Board* had power to "collect, examine, and provide information relating to academic standards, and to advise the appropriate authorities on orderly academic development of Universities, established under this Act, and Colleges established under the Public Schools Act by keeping in review the academic standards of each."

In response to its mandate the *Academic Board* published a number of reports which provided guidelines for the orderly academic development of college programs and also to expedite the transfer of credit for students who began their degree programs in colleges and eventually continued to university.

The latter task was accomplished by the establishment of "articulation committees" in a variety of academic disciplines (e.g., English, biology, mathematics, and commerce) which brought together representatives from the individual university and college departments to discuss curriculum, standards, course outlines, examinations, etc.

Further, procedures were established by which course outlines were negotiated between departments, whereby the university had the opportunity to examine the relevant factors in a course proposed by a college for transfer credit.

The particular instruction is as follows:

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[1] Most B.C. colleges did not begin as fully comprehensive institutions, but acquired a wide range of programs as they matured.

> Institutions should consider transfer students on the same basis as their continuing students except that admission of college students to university should normally be subject to a minimum overall average of "C". Colleges must accept the responsibility of ensuring the "C" represents an acceptable level of achievement relative to further studies; maintenance of relative standards should be one of the concerns of the articulation committees. Notwithstanding this general provision, a university while recognizing the right of the college student to transfer, may require a higher level of achievement on transfer to match the level required of its own students for admission to programs of study to which access is subject to limitations. Universities must make provision, whilst maintaining confidentiality of the records of individual students, for reporting the progress of transfer students to the colleges from which they had transferred.

With respect to levels of achievement the following statement is provided in the guidelines.

> Colleges and universities should be prepared to provide one another with the following information: course name, course number, hours per week (lecture, lab, seminar), objective of course, outline of topics covered, texts and required readings; and, although subject to change, the initial proposals for method of instruction, method of evaluation and the names of instructors and the nature of their degrees or similar qualifications and areas of competency. A standard form might be used by all colleges and universities to exchange this information.

Once a course is approved for transfer by an individual university department that course is included in its *Transfer Guide*, which is peculiar to each university, and contains information such as:

(i) specific equivalent of a given course

(ii) unspecified (elective) credit in a discipline or department

(iii) unspecified (elective) credit in a faculty

(iv) limited unspecified (elective) credit as stipulated by the university for academic college courses not identifiable with specific university course offerings.

The published *Transfer Guides* provide a formal assurance to students that credit will be awarded by the receiving university if the student attains the necessary academic standard.

The *Academic Board* was later replaced by the *Post-Secondary Coordinating Committee* but the *articulation committees* continue to function.

Some critical comments on the current system in British Columbia

So long as a student follows the conditions outlined in the transfer guide and meets the required academic standard, he or she has very little problem in being awarded credit or transfer.

However, if the student changes his or her mind regarding either the department or the university to which he or she wishes to transfer there can be serious complications.

Part of the difficulty lies in the fact that each university sets its own "rules and conditions" and there is often very little relationship among them. The three separate and distinct *transfer guides* reveal the extent to which the universities individualize their course offerings. Faced with the varying and separate expectations of the three universities, the colleges are forced to try to provide three separate programs in pre-engineering or pre-commerce, for example, to accommodate the transfer goals of all students. In colleges with small enrollments this is virtually impossible.

Another problem is that, while universities are supposed to provide "lead-time" for changes in course equivalencies and credits, insensitive new department heads may make changes without adequate notification. Students may be caught in such changes and risk losing credits.

In the last three years a new problem for the colleges has arisen as a result of unilateral university action. Faced with budget constraints the universities (particularly UBC) have imposed quotas for students entering initially from high schools and for those transferring from colleges. Quotas are set by academic performance, which means that the published 2.0 GPA as a minimum level for admission may rise to 2.2 or 2.5 as the quota is filled. While the universities have warned that this situation may occur it does create problems for college counsellors and their students.

The problems of articulation regarding credit transfer in British Columbia eventually surfaced in a recent report published by the Ministry of Advanced Education (*The Access Report*, 1988). After commenting upon the need for improved communication among the institutions of post-secondary education if better access to students was to be assured, the Report stated:

> It is recommended that a Co-ordinating Council on Admissions, Transfer, and Articulation, with representatives chosen from names submitted from within the system, be established to provide a mechanism for the resolution of difficulties which may arise from time to time with respect to admissions, course and program equivalency, degree requirements, and transfer of course credits.

Time will tell if this proposed body will earn the support of the institutions and provide a forum for improved articulation.

The British Columbia Open Learning Agency

In 1978, the then Open Learning Institute was established as a "distance education" institution by which students could complete a variety of courses in various programs, including degrees in selected areas of study. According to Moss (1979), the "general transfer credit policy of the Open Learning Institute was to match the credit given by any one of the other three universities."

In recent years the Institute has become the Agency, with an Open College and an Open University. In creating the latter there was also a first attempt to develop a province-wide transfer guide which brought all courses listed for transfer credit into one single document. In assessing the previous learning credits of a student working to complete a degree in the Open University all relevant courses are recognized, irrespective of the university from which they were earned. While a combined Provincial Transfer Guide still does not exist in B.C., a group spearheaded by Chris Moss of OLA has begun negotiations to that end.

Another initiative taken by OLA concerns the creation of a Credit Bank. The Bank allows for the award of two types of credit, "formal" as from a recognized educational institution, and "non-formal" which applies to knowledge obtained from other sources. The principle of the *Credit Bank* is that the knowledge itself qualifies for credit, rather than where it was obtained (Moss, 1989). It is inevitable that through the initiatives of new and less traditional educational institutions, such as the Open Learning Agency, the conservative policies of the established universities towards transfer credit will eventually be changed.

Some British Columbia facts and figures

The most recent data (1985/86) in British Columbia indicate that of 30,255 students eligible to graduate from Grade 12, 3,680 (12%) eventually enrolled in a university and 5,401 (18%) enrolled in their local community college.

The following shows a breakdown of the fortunes of each 100 students who began Grade 12 in 1985 in British Columbia.

89.0 - are eligible to graduate

31.0 - have grades to ensure university admission

9.5 - enroll in university

14.0 - enroll in university-transfer programs in a college

4.0 - enroll in BCIT

7.0 - enroll in college technical/career programs

Eventually 4.7 (approx 34% of the university-transfer students) will transfer to university. Of the original 100, 8 will eventually earn a university degree, 3 a BCIT diploma and 3.3 a college technical diploma.

Participation data in colleges and universities also indicate a considerable age differential, *i.e.:*

Age Group	University	College
18 - 21	44%	38%
22 - 24	24%	13%
25 +	33%	49%

There is a considerable range in participation by region of the province.

The percentage of students who enroll in colleges over universities is considerably higher in rural British Columbia than in metropolitan areas. In 1986, approximate enrollment in British Columbia colleges and institutes broke down as follows:

Academic (U.T.) 25,000, of which 11,000 were full-time

Career/Technical 31,000, of which 13,000 were full-time

College Preparatory (have not completed grade 12) 6,000

A large number of students were enrolled in *vocational* programs, but because of the length of many such courses it is difficult to classify them into comparable full-time enrollment.

Transfers from college to university

The last available data (1985/86) show that 3,104 students transferred from the fifteen public community colleges to the three universities. Of these, 1,806 (60%) transferred after one year and 747 (25%) after two or more years. The remaining 461 entered with less than one year of credit.

The number of transfers has been rising, i.e., in 1979/80 the number was 2,407 and in 1981/82, was 2,532.

Of the 1985/86 group, 62% came from metropolitan colleges, and 38% from rural colleges. (In B.C. all three universities are located in either Vancouver or Victoria.)

In general, metropolitan students choose a university close to home. Rural students split among all three universities.

Transfer students entered the following faculties.

UBC - Arts (37%), Science (28%), Education (21%), Commerce (11%).

UVic - Arts and Sciences (79%), Education (21%).

SFU - Arts (50%), Science (20%), Education (20%), Business (10%).

Transfer rates

The actual *rates* of transfer vary depending upon the location of the college, i.e., *rates* (based upon 1st and 2nd year, full-time enrollment):

Metropolitan colleges	34%	(range 51% - 25%)
Rural-Urban colleges	31%	(range 39% - 28%)
Remote colleges	27%	(range 29% - 14%)

Students from career-technical programs in colleges (as distinct from "university-transfer" students) do not normally qualify for transfer credit in B.C. universities, nor do students from the British Columbia Institute of Technology.

However, several career-technical students receive credit at Lakehead University, Lethbridge University, and the University of Alberta.

2a. The University-College Concept in British Columbia

Following a detailed study and the preparation of a report on accessibility to post-secondary education in British Columbia, action has been initiated by the Ministry of Advanced Education and Job Training to provide opportunities for students to complete university degrees without being required physically to attend university.

Inter alia, the access study revealed that B.C. was deficient by approximately 15,000 places in degree programs, based upon the national average. While two thirds of these new places were projected for the Lower Mainland (where UBC & SFU are located), access to degree programs in the interior of the province is now restricted to the first two years of transfer programs in the current network of community colleges. Students may also complete degrees by distance learning arrangements through the Open Learning Agency, but this option is preferred by a limited number of students.

In order to address the shortfall in degree programs the following action has been proposed.

a. That in three community colleges (Malaspina in Nanaimo, Okanagan in Kelowna and Cariboo in Kamloops) cooperative arrangements will be developed with one or more of the three universities (UBC, SFU, and UVic), to offer 3rd and 4th year courses leading to degree completion in any of Arts, Science, Education, Nursing, and Business Faculties.

   Instructors will be jointly appointed by the college or the cooperating university, but will be members of the college faculty association.

   The degrees will initially be under the auspices of the university, but in the projected future it is intended that authority to grant the degrees will be passed to the colleges.

b. In Prince George negotiation has centered upon the creation of a "northern university" as a new institution. This arrangement has yet to be finalized.

c. In the Lower Mainland, Simon Fraser University has been asked to work with two community colleges (Fraser Valley and Kwantlen) to develop a branch campus in the valley which will offer 3rd and 4th year degree courses in cooperation with the two colleges.

Comment

The "university college" concept is an extension of the first two years of academic (university transfer) courses in the community colleges. Without this base a totally different administrative structure would have been necessary.

In this writer's view the intention to eventually extend degree granting capability to the college is one which has serious potential consequences. In other jurisdictions (e.g., England, Australia, Ryerson in Ontario) the addition of degree programs spells the ultimate demise of the comprehensive college concept.

Non-degree programs, such as adult upgrading, and vocational/technical diplomas and certificates, are seen as being "improper" in a degree granting institution. Hence they are either discontinued or relegated to a second (and inevitably "second class") institution.

If one is strongly supportive of the concept of a comprehensive community college (which this writer advocates) the advent of degree programs under a college authority is unacceptable on curricular grounds. The logical and acceptable arrangement is to retain the jurisdiction of the university over degree programs, and also retain the "university-college" component as one optional stream located on the college campus.

3. Alberta

While colleges of various types and applications have existed in Alberta since 1908, the first public comprehensive community college was founded in Lethbridge in 1957.

Lethbridge Community College was the product of negotiation between the School Board, the Ministry of Education, and the University of Alberta. The first goal of the community, that the college would offer courses equivalent to those in the first years of the university, set the model for university transfer programs which were to be an important feature of almost all public colleges in Alberta.

In the early years of the nineteen sixties, however, transfer credit was under the unchallenged authority of the University of Alberta, and many difficulties emerged due to the obstacles and conditions imposed by the university before transfer credit would be guaranteed.

Despite efforts to formalize transfer arrangements by various intermediary bodies (Provincial Board of Post Secondary Education, the Colleges Commission) little real progress was made until 1974 with the creation of the *Alberta Council on Admissions and Transfer*.

Partly because of frustration expressed by the Ministry of Advanced Education with the lack of real progress on transfer agreements, and partly due to pressures from an increasingly mature college sector, the ad-hoc independent university policy towards credit transfer could no longer be sustained. Hence, the *Council* provided a forum for representatives from all affected parties to iron out transfer problems and provide assurance for students working to earn degrees after taking college courses (Long, 1979).

The terms of reference of the *Council* allowed for the exercise of its authority only to the extent delegated by the institutions themselves. Hence, the Council provides a forum for discussion and negotiations and publishes a province-wide *Transfer Guide* which includes a list of all institutions in the province and the course numbers which indicate credit equivalency.

Resistance from the established universities in Alberta (Calgary and Alberta) is such that various obstacles to transfer still remain. However, Athabasca, a more recent distance education university, acts as a facilitator of transfer by attempting to articulate its programs with those of other post-secondary institutions.

As Konrad and Small (1986) note,

> "First-year courses have been generally more acceptable for transfer than second-year courses. Courses requiring two years of prerequisite study are not usually considered suitable for transfer. The number of courses that can be transferred by any student is practically limited by the requirement of two years of full-time study at the receiving university as a condition for graduation (p. 13)."

The Council was restructured in 1986 to provide for representation from the public, students, universities, public colleges and technical institutions, hospital schools of nursing, and private colleges.

Some critical comments on Alberta

While the formal publication of transfer credit agreements gives assurance to students contemplating transfer, a recent potential problem has arisen as a result of the intentions of the two major universities to raise admission standards and impose quotas for transfer students.

It is anticipated that the number of "places" will depend upon the pool of students wishing to transfer. Recent funding increases have allowed these colleges (Mount Royal, Red Deer, and Grant MacEwan) to increase their enrollments of transfer students. Whether the universities can accommodate a subsequent increase in transfers is not yet clear.

Overall, the number of students seeking a university degree in Alberta is on the increase. Careful planning and better articulation among colleges and universities will be needed to meet the demand.

Some facts and figures on Alberta

In the interim between 1979 and 1987 transfers from college to university increased significantly. In 1979 the figure was 1,788; in 1987 there were 4,270 transfers, a 139% increase.

In particular, the number of students enrolled in colleges on a part-time basis increased at a greater rate than the number of full-time students. (The ratio of full-time to part-time was 77:23 in 1979 and 62:38 in 1987.)

While there are no accurate data it is estimated that the transfer "rate" in Alberta is approximately 30-35% (a figure similar to B.C.).

Various studies have been made of the performance of transfer students at university. In general, these students show an initial drop in G.P.A. but tend to improve their performance after the first transfer "shock". Students transferring with two years of university credit perform better than those with one year (Konrad and Small, 1986).

Other recent studies in Alberta (Vaala, 1988) indicate that students were more satisfied with their college experience than their university experience, particularly those from rural areas.

4. Quebec

The concept of transfer credit between colleges (CEGEPs) and universities, as outlined in the discussion re other jurisdictions (Alberta, B.C., United States), is not applicable to Quebec.

The college system in Quebec represents a *pre-university* level, at which students may earn a diploma, Diplôme des études collégiales, which qualifies them for admission to the three year baccalaureate degrees at the universities. As college courses are designated as *pre-university*, a student may *not* earn degree credits while at colleges, as is the case in Alberta and B.C.

Students at college, however, are advised as to which courses are needed as *pre-requisites* to specific degree programs at university.

For example, the CEGEP pre-university Commerce program, which prepares a student to enter the Business Administration faculties, requires three *designated* Mathematics courses, as well as Social Science courses.

Students from Quebec colleges may earn Ontario university credits, however, provided they follow a specific course of studies set by the particular Ontario university. For example, a student who has successfully completed two years in a CEGEP, and has followed the course of studies approved by Queen's University, will receive credit for first year of the baccalaureate degree on transfer to that university.

The universities in Quebec have no *direct control* over the curriculum in the CEGEPs. However, there is an Advisory Committee of university and college representatives, chaired by a Deputy Minister and under the auspices of the Minister of Education, which meets from time to time to discuss program pre-requisites.

Comment

It may be said that alone among the Canadian provinces, Quebec has created an integrated postsecondary *system* within which the levels are clearly defined and one level prepares for the next. Hence, concepts such as "course equivalency" have no appropriate meaning in Quebec.

To draw any implications for Ontario from the Quebec experience requires a stretch of imagination. The most relevant application would be for Ontario to remove the Grade 13 level (formally or informally) from the secondary schools and place it in the colleges. Under this arrangement a student would graduate from high school after Grade 12 and proceed to the college for one year before entering the university. Another approach would be to provide an optional second year of academic studies at the college after which a student could enter the second year of a university baccalaureate program.

At the present time the greatest single *administrative* advantage of the Quebec system is that it allows for little or no ambiguity or debate among colleges and universities over course content, standards, equivalency and admission criteria.

IV. Selected Effects of Transfer Arrangements

1. Accessibility

The evidence available after two decades of transfer credit developments in Alberta and British Columbia indicates that participation rates, particularly in degree programs, increase as a consequence of transfer agreements. Even if the actual transfer rates alone (in the vicinity of 30%) are used as evidence,

many students, particularly those classed as "mature", are able to complete university degrees. There is little doubt that many "transfer" students would have been excluded from the degree "stream" had the colleges not provided the initial access.

Studies conducted in British Columbia (Dennison et al, 1974) indicated that in regions where community colleges had been established, participation rates in post-secondary education were significantly higher than in regions without colleges.

Student interest in university transfer programs in colleges is by no means confined to rural areas. In fact, the largest university transfer program enrollments are to be found in colleges located in Vancouver, Victoria, Calgary and Edmonton (where, of course, the populations are concentrated).

A "university transfer stream" in a college clearly increases access to students who would have had great difficulty in gaining initial entry to a university, e.g., mature, socioeconomically disadvantaged, and those with unspectacular academic records.

While the Quebec situation is not analogous, it must be noted that the impressive (if not spectacular) rise in participation rates in post-secondary education in that province since 1965 must be attributed to the creation of a province-wide network of polyvalent, open access colleges. The large number of people in Quebec holding degrees in 1989 is a direct reflection of the impact of the CEGEP system.

In the cases of Alberta and B.C., the steady increase in university enrollments bears testimony to the view that the advent of colleges has not been detrimental in terms of university participation rates. In fact, the converse appears to be true.

2. Programming

Based upon the Alberta and B.C. experience again, it is apparent that academic (or university transfer) courses can coexist with technical, career, vocational, upgrading and community education programs without any major evident disadvantages.

Academic courses are used to supplement general education components of career programs. In fact, students from the two streams share the same classrooms in some cases. Students may, and do, transfer from one stream to another. Students also enroll in academic courses after their initial college experience within upgrading or community education programs. Quebec colleges provide a "common" general education exposure to all students irrespective of their educational goals.

It is true that universities have a considerable influence upon the nature and content of academic courses. As described in other sections of this paper, a process of negotiation precedes the designation of a course as "transfer credit". As colleges and college systems mature, however, they assert their influence upon university equivalent courses more strongly.

It is also worth noting that academic courses have a positive influence upon the "scholarly ethos" of a college in that they lead to the presence of students and faculty members who add an important additional dimension to the "job training" atmosphere of many colleges.

Conversely, there are some who will argue that the presence of academic courses "dilutes" the job oriented emphasis and "singleness of purpose" of the technical/vocational institutions. Further, it may be argued that, inevitably, academic instructors and administrators dominate the culture of the college. The effects may be seen again as detrimental to the job training focus of the institution.

While there is truth in this last argument, in the view of the writer the presence of academic courses (which should be seen as having an integrity of their own, as well as for university credit) provides advantages to both students and the colleges which far outweigh the disadvantages.

3. Admission Requirements

As colleges are committed to widening accessibility to post-secondary education, their admission policies are inclined to be liberal. While the number of seats available limits admission to technical/vocational programs, normally this situation does not apply to "academic-transfer" courses. Most colleges apply an "open admissions" policy to the latter, particularly with respect to mature students (generally classed as being one year or more out of high school).

The general attitude of universities is that college admission requirements are not their concern. In assessing students for admission with transfer credit, the universities evaluate college courses, but not pre-college courses. This policy allows for mature students to re-enter the educational stream irrespective of their previous academic records.

It is important to remember that perhaps the key reason for instituting university transfer courses in colleges was to expand access to degree programs for students who, under normal circumstances, could not have entered the university directly.

4. The Issue of Parity Esteem

A good deal of analysis has been given to this question (Dennison, 1984). The consensus is that the presence of university transfer courses raises the "status" of colleges in the eyes of both the universities and the wider community.

It would be quite naive to claim that universities regard colleges as "equal partners" in the education enterprise. There is, and presumably will continue to be, a proportion of university personnel who see colleges as "havens for the academically less qualified." Nevertheless, in both Alberta and British Columbia there is an increasing trend towards coordination between colleges and universities in the interests of a more effective PSE system. In this climate, mutual esteem tends to grow.

While there exists a clear differentiation between the roles of colleges and universities, particularly in Ontario and most other provinces, it is inevitable that a sense of "first and second class" institutions will prevail (Murray Ross made this point eloquently in 1965).

However, when students may begin their university degree studies in either institution (Alberta and B.C.), it is evident that the differentiation begins to fade. The recent trend in British Columbia towards "university colleges," outlined in another section of this paper, has played an important role in the development of the increasing respect which colleges and universities hold for each other.

5. Administrative Structures

Once a college incorporates university transfer courses into its curriculum a new set of administrative functions must follow. Provision must be made for liaison with one or more universities, both at the institutional level (Dean of Academic Studies, Registrar, Dean of Student Services, etc.) and at the discipline level (Sciences, Social Sciences, Humanities, etc.).

A transfer of credit "contract" will develop in a manner dependent upon whether it be at the institution-to-institution level, through the auspices of a Ministry committee, or through a form of intermediary body.

It will be necessary to create ongoing negotiations with departmental representatives at both colleges and universities to ensure the orderly approval and recognition of transfer courses.

Once transfer agreements are in place it is essential that counsellors interpret them correctly to students to ensure that difficulties with transfer credit will not occur at a later date.

The Registrar's Office will prepare transcripts for students which will reflect the details of transfer agreements regarding course numbers, Grade Point Average, etc.

It is also important that, once transfer students appear in large numbers in universities, colleges should monitor their performance and hence assess the preparation which they receive in college. If this is done, colleges will need to establish an institutional research capacity.

V. Implications for Ontario

The fundamental question to be addressed in this section is whether it would be appropriate to establish transfer courses in the colleges of applied arts and technology which will articulate with university degree programs. Only after answering this question should the design, and terms and conditions of the arrangement be discussed.

There are two primary reasons for exploring a transfer policy in Ontario:

a. to accommodate a problem of access;

b. to make more efficient and effective use of the post-secondary system.

1a. The Problem of Access

Ontario is well served by a large number of universities and colleges. Further, unlike the case in other provinces, the universities are located throughout the province in all major population centres. Access to university programs, in geographic terms, appears *not* to be a significant problem, although clearly there are numbers of people who do not have easy access to post-secondary education and for whom a distance learning arrangement is neither appropriate nor acceptable.

However, access, in regard to the limitation upon places available in university degree programs, seems to have emerged as an issue. In Ontario, university degree programs are restricted to universities, and students with this objective must find a place in a university. When the number of applicants exceeds the number of seats a problem of access emerges. Conversely, an increase in demand for university degree programs by a finite pool of potential postsecondary students will result in an accompanying reduction in applicants for non-degree college programs.

It is obvious that this problem may be addressed by developing university degree places in colleges and providing for transfer after one or two years to a university. But to create transfer programs in colleges on the basis of this argument would be difficult to defend.

Aberrations and fluctuations in student enrollment patterns are common. Interest in high technology, science, social sciences, education and business, for example, ebbs and flows with the economy and expectations often created by the media. Major surgery on the post-secondary system to cure this ailment would be difficult to justify.

1b. Improving the Effectiveness of the System

For well documented reasons, Ontario chose to develop a binary system whereby colleges and universities fill separate and distinct roles. It must be assumed that this decision anticipated that students can and will make clear choices based on their aptitudes, abilities, socioeconomic status, parent/teacher/counsellor advice, or other reasons. Their choice will then determine the credential which they earn and their subsequent career options. Changes in educational goals under such a system will, of necessity, have consequences in that students often must "begin again" in a different program, often in a different institution.

In practice, however, students are inclined to make neither correct nor realistic choices. They misjudge their capabilities, find technical or academic programs unsuited to their interests, develop new career goals and, as a result, attempt to re-enter the educational stream at a new juncture. A responsive, flexible *system* of post-secondary education should accommodate these responses by students, provide for recognition of *appropriate* credits earned, allow for goal changes with minimum difficulty, and recognize that student abilities and interests emerge at different stages and that the system's prime response should be to society's needs rather than for institutional convenience.

A society rooted in a period of technological change, such as anticipated in the nineteen nineties, will expect to access an educational system which provides opportunities for upgrading, retooling, new learning, and responsiveness to the realities of a dynamic information age. Under the present structure Ontario's colleges and universities are not ready for such a challenge.

If the Ontario post-secondary system is to perform effectively in the third millennium it must do so as a cooperative coordinated enterprise. Within this structure the separate institutions must play differentiated roles while meeting the life long learning needs of individuals who will enter and re-enter the system at different times, at different levels, and in different circumstances.

An unbiased appraisal of transfer credit possibilities and arrangements would be a useful beginning if Ontario is to prepare its post-secondary educational system to meet the demands of a society for which advanced learning will assume a new importance and require different forms of access. A system of colleges and universities designed for the seventies cannot meet that challenge in the future.

2. Ontario's Universities and Colleges: Autonomous Institutions or a System

In the context of a discussion of transfer of students between institutions, a fundamental philosophic question arises. Institutions of post-secondary education may be viewed in one of two ways:

a. Individual universities and colleges are autonomous and each may be expected to establish its own curricula, standards, admissions criteria, programs, enrollment quotas, etc.

or

b. Provincially funded colleges and universities are all part of a *system* of post-secondary education. As such, they set curricula, admission criteria, etc. *in concert with each other*, ensuring that equivalency of course credits is maintained in the interests of students who may elect to move from one institution to another.

In general terms, the condition existing in most Canadian provinces represents the first of these two options. Canadian universities, in particular, have sought and maintained a high degree of relative autonomy.

Nevertheless, there are also various forms of cooperative arrangements to be found in Canada, such as the approaches developed in Quebec, Alberta and British Columbia. In each of these provinces the

individual institutions retain their autonomy, but cooperate in varying degrees in the matter of transfer credit and other forms of articulation.

If Ontario's binary system of post-secondary education is to move towards a more cooperative arrangement, the universities, in particular, will have to surrender some part of their traditional autonomy. Whether they are prepared to do this voluntarily or involuntarily will depend upon the approach taken by the ultimate arbitrator in this exercise, the Ministry of Colleges and Universities. If the latter is able to find a sensitive, incremental approach, coupled with an equally careful manipulation of incentives, a more coordinated system will emerge. The fundamental question is one of leadership. The outcome is one in which the real beneficiaries will be the people of Ontario.

3. A System of College-University Partnerships

An arrangement which could be worth exploring in Ontario is to establish formal partnerships between certain geographically associated colleges and universities, e.g.:

College	University
Confederation	Lakehead
Fanshawe	Western Ontario
Sir Sandford Fleming	Trent
St. Lawrence	Queen's
St. Clair	Windsor

Rather than allow for the development of ad-hoc linkages between particular institutions, the Ministry, in consultation with COR, COU and the colleges and universities might establish formal guidelines for partnership. The guidelines might include a format of transfer guides, articulation committees, student counselling centres, etc.

One serious disadvantage of such an arrangement is that assurances which students will have regarding credit transfer would be limited to the parties in each partnership. It would become inevitable, however, that more broadly based transfer agreements would emerge as the practice matures and students seek to transfer beyond the institutions in the partnerships.

4. An Ontario Council on Admissions and Transfer

Under the auspices of the Ministry of Colleges and Universities, a Council on Admissions and Transfer would be established which would take responsibility for setting formal policies on credit transfer and articulation. Such policies (which may be in the form of guidelines, rules, or conditions) would apply to all public colleges and universities in the province.

The *Council* would oversee the preparation and production of *transfer guides*, establish the framework of articulation committees, could formalize the courses and programs to which credit transfer will apply, and would generally be responsible for all policies relating to transfer.

Membership on the *Council* would include representation from the institutions. The roles of the Council of Regents, Council of Ontario Universities and other established bodies are problematic in such an arrangement.

While the creation of such a *Council*, with clearly legislated authority, could streamline the transfer process, there are some evident disadvantages.

The creation of a powerful bureaucratic body in a province with as many long established institutions as Ontario would likely be viewed with much suspicion by the latter. The issue of potential violation of traditional autonomy, and the spectre of Ministry intrusion into the affairs of the institutions would surely arise.

Clearly, an initiative of this kind would demand sensitive and imaginative leadership.

The handling of conflicts between institutions and transfer policies or procedures presents a difficult challenge. The tendency is for the universities to exercise their traditional power to the disadvantage of the colleges. It is possible, as is the case in Alberta, to provide for the inclusion of an arbitrator in the form of a province-wide Council or Board, on which all institutional groups are represented. It would *not* seem to be appropriate in Canadian tradition to provide the government ministry with authority to resolve disputes. Institutional autonomy is reflected in relevant legislation applying to governance. Universities are quick to point to the philosophical and practical implications of preserving such autonomy.

VI. Some Options for Ontario

It is suggested that three possible aspects of transfer credit arrangements are worth considering in Ontario. These approaches are not mutually exclusive and all should be considered in developing a comprehensive policy in regard to transfer. They arise out of the binary system which currently exists in Ontario and are made with consideration for the historical development of post-secondary education in that province since 1964.

These aspects are:

a. A formalization of credit transfer policy with respect to the large number of academic courses which are currently offered in Ontario's colleges.

b. The formal development of a number of professional programs which allow for the first two or three years in the colleges with the subsequent option of two years in a university to complete a degree.

c. A formal arrangement by which colleges will offer the first one or two years of a baccalaureate degree with provision for transfer to a university to complete the degree.

Each of the foregoing will be explored in more detail.

1a. Academic Courses

Ontario's colleges have long offered a range of academic courses in the pure and applied sciences, social sciences, and humanities as components of general education requirements for diploma programs. Many students who elect to enter university after college are granted advanced credit towards a baccalaureate degree. However, the practice is dependent upon the policy of the receiving institution, which will vary considerably by institution, and is essentially on a student-by-student basis.

It is suggested that this entire policy be formalized on a province-wide basis. Colleges would submit course materials, evaluation practices, instructor credentials, etc. regarding appropriate academic courses to the Ontario Council on Admissions and Transfer (as described earlier) for discussion with university representatives. The ultimate objective would be to produce a province-wide *transfer guide* which would contain courses listed in each college which have been approved by the *Council* for transfer credit to listed universities.

The *Transfer Guide* would then provide a formal basis by which students would be assured of credit on transfer. Assuming that students met the published conditions, credit would be awarded as a matter of policy.

1b. Professional Programs

In the light of market demand in the next decade there will be a number of professional and quasi-professional programs which could lead to the award of various levels of credentials in accord with the emerging demands of the workplace.

Examples of such programs include nursing, medical laboratory and similar health technologies, journalism, computer analysis, travel industry, business options, personnel administration, and dental hygiene — all of which require increasing sophistication and improved academic preparation to the diploma level and would allow students, either immediately or after a period of work experience, to continue their studies at university for another two years to degree level.

It is recognized that some arrangements such as proposed in this section currently exist, nursing being an obvious example. What is being proposed, however, is that these arrangements be expanded and formalized.

The procedure for formalization would involve negotiations through the offices of a province-wide ministry-based body on *Program Development and Articulation*. Under the auspices of this agency, college and university representatives would formalize the program articulation conditions and publish same for the information of counsellors and potential students.

Program proposals could be initiated from several sources: the institutions, ministry and other government agencies, the business community, professional associations, etc. The curriculum would be the responsibility of the institutions involved, but developed cooperatively.

1c. University Transfer

This option really requires no detailed description as it is effectively the same as that which currently exists in Alberta, British Columbia, and in many of the United States.

It would be subject to the same problems of jurisdictional disputes, administration, articulation, and credit recognition.

One issue which could arise in Ontario is whether a small group of universities would develop individual credit arrangements with the colleges, or whether a system-wide policy would be developed. The decision would rest largely with the role which the Ministry of Colleges and Universities elects to play in the process. Clearly, the Council of Ontario Universities, the Council of Regents, and other appropriate bodies should be involved in the process.

While a body such as the proposed *Ontario Council on Admissions and Credit* would play a critical role in ensuring the success of this option, there are other approaches to the entire issue of articulation between colleges and universities. A paper outlining one model is to be found in a separate paper attached to this document (*Towards Improved Coordination of Post-secondary Education: A Model for the Nineties).*

Concluding comments

This paper has presented an overview of the issues and aspects of a policy of transfer credit arrangements between colleges and universities within a provincial jurisdiction. While there is much to be

learned from the history of articulation and credit transfer practices in Alberta, B.C. and Quebec, the writer is well aware that the historical, socio-cultural, economic, and educational conditions which prevail in each province are, in several respects, unique. It would be quite naive to assume that Ontario could simply graft a similar set of policies upon its long established and quite idiosyncratic postsecondary educational system.

Nevertheless, there are aspects and elements of transfer credit practices and policies which seem to be found in all jurisdictions. It is these factors which have been identified as being worth consideration by Ontario.

There is little doubt that formal transfer credit arrangements on a province-wide basis would significantly disrupt the roles and the relationship between Ontario colleges and universities. However, the argument has been advanced in this paper that if postsecondary educational institutions and systems are to meet the needs of society in the new technological age a much more coordinated and articulated system will be necessary. This thesis applies to Ontario no less than it does to other jurisdictions.

Provided change is carefully crafted, incremental, and sensitively managed, an approach to credit transfer, based upon the current system in Ontario, should be successful. This paper has attempted to document both the benefits and the potential pitfalls of such a policy.

All factors considered, it is the recommendation of this writer that Ontario should move deliberately towards a credit transfer policy. The benefits to the students would clearly outweigh the inevitable disruptions to the institutions.

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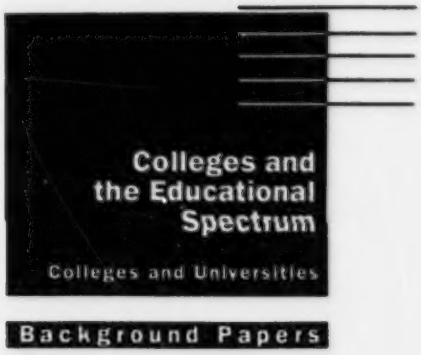

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How Ontario's College System Might Respond to Pressures for the Provision of More Advanced Training

Study Team 5

How Ontario's Colleges Might Respond to Pressures for the Provision of More Advanced Training

Summary

In the original mandate of Ontario's Colleges of Applied Arts and Technology, their role was to provide alternative courses and programs to those offered by the universities, and their occupational programs were limited to the diploma and certificate levels. This circumscription of the college system's role facilitated the concentration of resources and effort on meeting important social and economic needs that existed at the time the college system was created and during their first two decades.

By the late 1980s, however, several developments could be identified which warrant a reconsideration of the college system's role, particularly in regard to more advanced levels of education and training. These include:

- persistent pressure on university enrolment capacity while at the same time demand for enrolment in CAAT postsecondary programs seems to be declining;
- increased recognition of the limiting effects which credentialism in the labour market may be having on the career opportunities of graduates of CAAT occupational programs;
- the evolution of the professional and para-professional fields for which the CAATs provide training, which has created pressures for practitioners in those fields to obtain more advanced training and higher levels of academic qualifications;
- growing concern about the efficacy of Ontario's present configuration of postsecondary programs to meet the challenges of advances in knowledge and technology in the context of reduction in trade barriers and increased international economic competitiveness; and the corresponding interest in the development of polytechnic education in Ontario;
- concern about a trend wherein remediation, community service, and lower level, short term vocational training may become the dominant functions of the CAATs, and a corresponding interest in strengthening and rejuvenating the postsecondary occupational training function of the CAATs.

This paper examines the issues noted above and identifies ways that Ontario's system of postsecondary education might address them. Particular attention is given to explaining what credentialism is and suggesting how it may be limiting the career opportunities of CAAT graduates and preventing the province from achieving the best utilization of their capabilities. An attempt is made to explicate the elusive concept of polytechnic education, and alternative ways of fostering it are outlined.

Though the paper stops short of making formal recommendations, it offers the following tentative conclusions:

1. There is not an especially strong case to be made for having the CAATs assume the function of providing first and second year university arts and science courses. There is little evidence that substantial numbers of qualified applicants are being turned away from universities, or that the costs of accommodating them in CAATs would be significantly less than in the universities.
2. There is a great need to reduce the present barriers which limit the opportunities of CAAT graduates in certain professional fields to advance through established education-career ladders (e.g. accounting, nursing, engineering technology). What is needed to address this

'degree-completion' issue is a major effort on the part of universities and colleges to structure professional programs in the two sectors in such a way as to facilitate advanced standing for CAAT graduates in the corresponding university programs.

3. While the concept of polytechnic education in the context of Ontario postsecondary education needs further explication, the experience of other countries (particularly in Northern Europe) suggests that there may be an important gap in Ontario in this area. Three possible approaches to filling this gap are considered:

    a. joint CAAT-university programs;

    b. enabling some or all CAATs to offer advanced technical programs for which degrees would be awarded, either by the institutions themselves, or preferably by a provincial body modelled on the U.K.'s Committee on National Academic Awards (the CNAA);

    c. Stuart Smith's 'joint venture' concept, in which new 'brokering' institutions or a provincial body like that referred in point (b) above would award degrees on the basis of completion of a combination of CAAT and university courses.

4. Serious practical problems limit the feasibility of relying on joint CAAT-university programs for extensive development of advanced training.

5. The joint venture model offers such flexible, creative, and exciting possibilities for both fostering career development of individuals and meeting human resource development needs of Ontario industry that it warrants serious consideration.

6. The feasibility of institutions like the CAATs providing a path for advanced technical education at the degree level - which would be parallel to but distinct from the degree path provided by the universities - is well supported by the existence of such dual degree structures in European countries with which Canada competes economically.

7. Though presented as alternatives, the advanced technical degree option and the joint venture option could be integrated in some interesting ways. For example, a provincial body like that referred in point 3(b) could award degrees for (i) advanced technical education in the CAATs, following the U.K. model; (ii) combinations of courses taken in CAATs and universities, which might constitute a polytechnic curriculum; and (iii) courses taken by CAAT graduates in universities subsequent to graduation from a CAAT, thus solving the degree completion problem addressed in point 2.

8. Any of the options for more advanced training which involve the CAATs or new institutions or overseeing bodies awarding degrees will likely meet with a knee-jerk reaction reflecting the view that only the existing provincial universities should be allowed to grant degrees. While understandable in an historical context, this reaction may inhibit the appropriate development of new forms of postsecondary education in Ontario to meet new needs.

Mesures que le réseau collégial ontarien pouvait prendre pour répondre à la forte demande pour des cours avancés de formation

Sommaire

Le mandat original des collèges d'arts appliqués et de technologie prévoyait que leur rôle serait de fournir des cours et des programmes différents de ceux offerts par les universités et que les programmes de formation professionnelle seraient limités aux niveaux du diplôme et du certificat. Ce rôle a permis au réseau collégial de concentrer plus facilement ses ressources et de répondre plus efficacement aux besoins socio-économiques qui existaient au moment de la création des collèges et pendant les deux premières décennies de leur existence.

Toutefois, vers la fin des années 1980, plusieurs développements ont exigé la redéfinition du rôle du réseau collégial, plus particulièrement à l'égard des niveaux plus avancés d'éducation et de formation. Ceux-ci comprennent notamment :

- une progression constante des inscriptions universitaires, tandis que les inscriptions aux programmes postsecondaires des CAAT semblaient diminuer;
- une prise de conscience accrue des répercussions négatives que la survalorisation des diplômes sur le marché du travail peut avoir sur les possibilités de carrière des diplômés des programmes de formation professionnelle des CAAT;
- l'évolution des secteurs professionnels et para-professionnels, pour lesquels les CAAT fournissent une formation, a obligé les personnes y travaillant à obtenir une formation et une scolarisation plus poussées;
- l'inquiétude de plus en plus grande à l'égard de l'efficacité de l'organisation actuelle des programmes d'études postsecondaires de l'Ontario à relever le défi de l'évolution des connaissances et de la technologie dans le contexte de la libéralisation des échanges commerciaux et d'une concurrence internationale accrue, de même qu'un intérêt par rapport au développement de l'éducation polytechnique en Ontario;
- l'inquiétude à l'égard d'une tendance risquant de faire en sorte que le recyclage, les services communautaires et un niveau inférieur de formation professionnelle à court terme deviennent les principales fonctions des CAAT, de même qu'un intérêt par rapport au renforcement et au rajeunissement des activités de formation professionnelle des CAAT.

Le présent document analyse les questions énumérées ci-dessus et identifie des façons dont le système d'éducation postsecondaire pourrait y répondre. Le rapport explique le problème de la survalorisation des diplômes sur le marché du travail et indique comment cette situation peut limiter les possibilités de carrière des diplômés des CAAT et empêcher la province de bénéficier de leurs aptitudes. Le rapport tente également d'expliquer la notion plus ou moins définie de l'éducation polytechnique et énumère des moyens qui permettraient d'en favoriser le développement.

Même si le rapport ne présente aucune recommandation, il tire néanmoins les conclusions suivantes :

1. Les arguments invoqués pour que les CAAT offrent les programmes d'études universitaires de première et deuxième années dans les domaines des arts et des sciences ne sont pas très convaincants. Il n'a pas été démontré que les universités refusent un nombre important d'étudiants qualifiés et que le coût de la prestation de ces programmes d'études dans les CAAT serait beaucoup plus bas que dans les universités.

2. Il est nécessaire d'atténuer les obstacles qui ont pour effet de limiter les possibilités de carrière des diplômés des CAAT dans certains secteurs professionnels en les empêchant de progresser dans le cadre du système actuel (p. ex., en comptabilité, sciences infirmières, ingénierie). Pour résoudre le problème se rapportant à la poursuite des études, les universités et les collèges devront faire de sérieux efforts pour faciliter l'intégration des diplômés des CAAT dans les programmes universitaires correspondants.

3. Même si la notion d'éducation polytechnique au sein du système d'éducation postsecondaire de l'Ontario doit être mieux définie, l'expérience d'autres pays (particulièrement ceux de l'Europe du Nord) semble indiquer qu'il existe une lacune importante dans ce domaine en Ontario. Trois approches sont suggérées pour corriger cette situation :

   a) la création de programmes collégiaux et universitaires conjoints;

   b) la possibilité que certains ou tous les collèges offrent des programmes d'études techniques avancées pour lesquels les diplômes seraient accordés par chaque établissement ou par un organisme provincial semblable au «Committee on National Academic Awards» (CNAA) de la Grande-Bretagne;

   c) la suggestion de Stuart Smith de créer une «entreprise conjointe» qui permettrait à un établissement centralisé ou un organisme provincial, comme celui décrit ci-dessus, d'accorder les diplômes de fin d'études une fois que les étudiants auraient terminé une variété de cours collégiaux et universitaires.

4. Il existe de sérieux problèmes d'ordre pratique limitant les possibilités de créer des programmes collégiaux et universitaires conjoints pour assurer une formation plus poussée.

5. Le modèle de l'entreprise conjointe vaut la peine d'être considéré sérieusement parce qu'il offre des possibilités souples, créatives et intéressantes de favoriser le perfectionnement professionnel des personnes et de répondre aux besoins en ressources humaines de l'industrie ontarienne.

6. La possibilité que les CAAT offrent des programmes de formation avancée, parallèles mais distincts des programmes universitaires, conduisant à l'obtention d'un diplôme est réaliste parce que des structures semblables existent dans les pays européens avec lesquels le Canada est en concurrence sur le plan économique.

7. Même si la possibilité d'accorder des diplômes d'études techniques avancées et de créer une entreprise conjointe sont suggérés de façon distincte, leur intégration serait intéressante sous plusieurs aspects. Par exemple, un organisme provincial, comme celui mentionné au paragraphe 3 b) pourrait accorder les diplômes pour : (i) les programmes de formation avancée dans les CAAT, selon le modèle utilisé en Grande-Bretagne; (ii) les programmes collégiaux et universitaires conjoints, qui pourraient constituer le programme d'études polytechniques; et (iii) les cours universitaires suivis par les diplômés des CAAT, ce qui contribuerait à résoudre le problème décrit au paragraphe 2.

8. Toute initiative se rapportant à l'attribution de diplômes de formation avancée par les CAAT et à la création d'un établissement ou organisme provincial sera sans doute perçue de façon négative, reflétant ainsi l'opinion que seules les universités de la province devraient accorder les diplômes dans ce domaine. Même si cette réaction est compréhensible dans une perspective historique, elle peut néanmoins nuire au développement d'un nouveau système d'éducation postsecondaire en Ontario capable de répondre aux nouveaux besoins.

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Introduction

This paper addresses the question of how the Ontario system of Colleges of Applied Arts and Technology "might respond to pressures for provision of more advanced training" (the phrase in quotes is from the title of the assignment). The term, "more advanced training", is understood to include studies in the CAATs for which credit is granted by universities and other training which is beyond the present diploma level.

The phrase, "might respond", determines the character of the paper; its focus is on possibilities and arguments for and against those possibilities, and its orientation is conceptual rather than empirical. However, such information from Ontario and other jurisdictions as can usefully be brought to bear on the subject is cited.

In considering how the CAAT system might respond to pressures for the provision of more advanced training, the discussion will not be limited to those types of initiatives which the CAATs would have the authority to implement on their own. Indeed, as will be developed below, most of the ways in which the CAATs could impact significantly on Ontario's needs for more advanced technical and occupational training would require supportive action by government and/or cooperation from the universities.

While the author avoids making explicit recommendations, the discussion of the pros and cons of the various strategies will indicate more support for some options than for others.

I. Background

In the debates surrounding the establishment of the CAATs, the only issue of substantial controversy was the role that the colleges would have in more advanced level training, particularly whether the mandate of the colleges would include the provision of courses for which university credit would be given (Fleming, 1971: 515-518). The policy of the government on this matter was that, unlike the community and junior colleges in the United States which those who established the CAATs had investigated, the CAAT system would not be designed to provide courses for university credit - although colleges would be permitted to make bilateral agreements with universities for selected credit courses.

There were two major reasons for the government's decision on the transfer question. First, it was felt that a university transfer function, even if a relatively small component of the CAATs' total activity, would have an undesirable steering effect on the predominant occupational training function, rendering occupational training a "second class" activity, and the students in the occupational training stream second class students. In a widely quoted passage, Norman Sisco, then Director of the Applied Arts and Technology Branch of the Department of Education, and the person credited with being the architect of the CAAT system, warned that a transfer function would be, in effect, a Trojan Horse, and the result would be that in a few years a CAAT would become a "fourth rate liberal arts college with a few long haired pedants strutting around with a handful of students" (quoted in Fleming, p. 516).

The second reason for rejecting a transfer role for the CAATs was that it was deemed unnecessary. The government had already made plans which would place a university within 25 miles of 75 per cent of the "young people of Ontario", and the policy was to provide places in university for all qualified candidates. Thus, the Minister of Education, William Davis, asked:

> By what argument of common sense or sane economics could anyone justify at this time and light of that policy [on university accessibility], the building of duplicating facilities in colleges of applied arts and technology, to handle one or two years of university study? (quoted in Fleming, p. 514).

The opposition parties in the Legislature were uneasy about the compartmentalization of the new colleges from the universities and the terminal aspect of the government's plan for the colleges. The most vigourous criticism of this policy came from Liberal critic, Robert Nixon, who expressed concern that students attending the CAATs might be caught in "an educational backwater" and that the new institution might be one of "practical accomplishment but of intellectual apathy". The following observation by Mr. Nixon is worth citing, because it so trenchantly captures the view of those who were concerned about the implications of constraining the CAATs' role in the provision of more advanced training:

> He felt that the hewers of wood and drawers of water would be left intact, except that they would be able to hew wood with power saws and draw water with complex pumps. (Fleming, p. 517).

The programs of the colleges were to be terminal in another respect besides not making provision for transfer to universities. Unlike the universities, which had a sequence of levels beyond the first level of education i.e. Bachelor's to Master's to Doctorate, there was no provision in the CAATs for additional qualifications beyond the certificates and diplomas which were awarded for the first two or three years of study. Thus, the only route for CAAT graduates to proceed with their postsecondary education would be to "crossover" to the university stream.

While concerns were expressed about the transfer issue both at the time the colleges were established and from time to time since then, the limitations on the CAATs' role in regard to more advanced level training was generally accepted during their first two decades of operation. Over that period the CAATs were busy and demonstrably productive in developing and offering occupational programs in a wide range of fields, and becoming increasingly involved in providing remediation and community service programs. In the absence of a formal policy, "creeping transfer" activities emerged, in which individuals who did not qualify for university admission obtained the necessary qualifications through attending a CAAT, and in some cases received limited credit at some universities for their studies in CAATs. Also, a limited number of post-diploma courses were developed in the CAATs.

However, by the late 1980s, a number of developments had occurred in postsecondary education, technology and the workplace, and generally in Ontario society, which were deemed to warrant a reconsideration of the role of the CAATs in regard to more advanced level training, generally, and with respect to university transfer in particular. These factors are outlined below.

Postsecondary Enrolment Trends. While university enrolment continues to increase, enrolment in CAAT postsecondary programs has been declining for several years, compounded by declines in federal seat purchases from the CAATs. Universities have stated publicly that they do not have adequate funds for their current numbers of students, let alone capacity to handle increased numbers. Although there were indications of severe pressures on CAAT capacity as recently as 1985 (Skolnik et al., 1985: 70-76, 86-87), there is some perception that universities are overextended while the CAATs have, or will shortly have, excess capacity. Thus, the second of the government's original arguments against transfer (captured in the quotation from Mr. Davis, cited above) may no longer be valid.

Recognition of Credentialism. At the time the CAATs were established, the power of credentialism in the labour market was only dimly perceived. Credentialism is the practice of selecting individuals for entry to certain job fields, or advancement within those fields, on the basis of their formal educational qualifications even though the specific content of their education may not be absolutely required for performance of the tasks involved in their jobs. Although the incidence of credentialism is quite difficult to demonstrate empirically, it is the perception of labour market economists that credentialism has become quite widespread (Blaug, 1985). An implication of credentialism is that CAAT graduates would face significant barriers in their subsequent career development as a result of not possessing a degree, and they would encounter problems of career dead-ending. A related hypothesis is that students are aware that their long term career prospects may be limited by the lack of a degree, and this is a major factor accounting for the differences in enrolment trends between CAATs and universities.

For example, the following observation by Paul Fox, former Chairman of the Ontario Council on University Affairs, is typical of the popular perception of the reason for the difference in enrolment trends between the CAATs and the universities:

> Applicants were lined up at university doors trying to get in while seats were left vacant in community college classrooms. Apparently students preferred the ivy-covered halls because they believed that a university degree would bring them a better income and more prestige than a college diploma (Fox, 1989).

Evolution of Professions. Related to the observations about credentialism, in some professional or para-professional fields for which the CAATs provide training, the professional associations have been attempting to increase the stature of the field through making a degree a requirement for entry, e.g. nurses, physiotherapists (for which training was once provided in the CAATs), and possibly industrial accountants. Besides credentialism, increased sophistication of underlying theory and related technology has created conditions wherein more advanced levels of training, especially at the degree level, may be required. The issue is whether, given the limitation on the CAATs' role in degree studies, some of the professional fields for which the CAATs traditionally have provided training will "outgrow" the CAATs.

Polytechnic Education. Largely as a result of rapid developments in technology and related science, some observors have suggested that the competitiveness of Ontario industry is, or shortly will be, impaired by the lack of polytechnic education. Though elusive of definition, polytechnic education has been portrayed by these commentators as either a form of postsecondary education which is intended to bridge the gap between the theoretical emphases of the university and the applied emphases of the CAATs, or as a more advanced level of technical education than presently provided by the CAATs. Should the purported need for polytechnic education be deemed valid, this may call for the CAATs to assume a major role, either on their own, or in cooperation with universities, in providing a more advanced level of postsecondary education for which a degree - such as a Bachelor of Technology or Bachelor of Applied Studies - would be appropriate.

College Role and Identity. In the original vision of the colleges, their primary mission was to be serving Grade 12 graduates and adults with sophisticated, two- and three-year occupational training programs, especially on the cutting edge in fields where technology was developing rapidly. By the mid 1980s, not only was enrolment in the two and three year programs declining, but the greatest declines were in technology programs; attrition in two- and three-year programs was thought to be extraordinarily high, and many students were frequently stopping in and out; and the areas of greatest growth in the colleges were short term occupational programs, community service, and remediation. Though originally the colleges were expected to have community service and remediation functions, it was not envisaged that these would become the dominant functions of the CAATs, as is now threatening to be the case.

Reference to the literature on community colleges in the United States is instructive in this context. In the U.S., there has been widespread concern that many colleges have become primarily centres for community service and remedial education, and as a result colleges are becoming marginal to the educational system (Cohen, 1985). Clowes and Levin (1989) argue that:

> Remediation and community service were never functions that could stand alone as core functions of any higher educational institution; they always existed on the margin of the institution and were dependent upon other functions providing identity and justification for the institution and its place in higher education. When a core function is in place and institutional identity established, then and only then can marginal functions like remediation and community service become viable ... core functions must be established and the institution structured around that core function to survive (Clowes and Levin, p. 352).

What brought about the state of affairs to which Clowes and Levin refer was the atrophying of the transfer function of American community colleges, together with the growth in numbers of high school

dropouts and of youths, minorities, and others who are poorly prepared for the labour market. Arthur Cohen, Director of the Center for Community College Studies at U.C.L.A., estimates that now only about five per cent of community college students in the U.S. complete pre-university programs in community colleges and transfer to a university. While observors of American community colleges are generally agreed on the need for a new core function for the college, they are divided on what that core might be. General education and diverse models of occupational training have been variously proposed as core functions, but opinion is divided as to whether these could constitute a viable core.

Faced with a similar crisis of role and identity, Ontario CAATs face a similar question: what are to be their core functions in the next phase of their evolution? Following the arguments of Clowes and Levin, Cohen, and others, community service and remediation might not be viable options. A university transfer function is another option, but the atrophying of transfer in the U.S. - where transfer was originally the major function and articulation between colleges and universities is so much stronger than in Ontario - suggests that this may not be feasible. Indeed, the U.S. experience suggests that for Ontario CAATs to embrace university transfer now might be to board a sinking ship.

On the other hand, transfer programs appear to be robust in British Columbia and Alberta, and so perhaps it could be a viable function for the CAATs. Alternatively, some new form of advanced training, independent of the universities, and consistent with the historic emphasis on occupational training in the CAATs, might be more promising as a new core function. At any rate, an advanced training function for the CAATs should not be considered only on its own, but also in terms of how it fits into the colleges' larger mission.

II. Statement of the Issues

The discussion of how Ontario's college system might respond to pressures for more provision of more advanced training will be organized around the following four issues:

1. The pros and cons of placing first and second year university arts and science courses within the CAATs, i.e. the junior college function.
2. Structuring diploma programs in the CAATs in such a way that graduates can proceed to the corresponding professional programs in the university with a maximum of university credit for the work done in the CAATs.
3. How the concept of polytechnic education might be operationalized in Ontario - consideration of joint CAAT-university programs, application of the U.K. polytechnic institute model, and application of Stuart Smith's joint venture concept.
4. The potential for the CAATs to offer whole degree programs, particularly of a polytechnic nature, in selected fields, and for non-degree credit, post-diploma programs.

III. The Junior College Function[1]

Having originally rejected the U.S. junior college model, the principal argument for Ontario to now place first, and possibly second, year university arts and science courses within the CAATs is essentially an argument based upon currently perceived grounds of financial expediency. If there is excess demand for places in university, and at the same time declining enrolment in the CAATs, then wouldn't both problems be solved by using the CAATs as a vehicle for first and second year university courses for some students?

The answer is that under certain conditions, an aggregative numerical balance might be achieved by this strategy. However, we have to consider such factors as admission standards, regional distribution of students, relative costs, qualifications of faculty, quality of programs, and likely student outcomes in order to determine the viability and feasibility of the strategy.

Vesting the CAATs with a junior college function might make sense if (i) many qualified applicants to university were being turned away because the universities did not have sufficient capacity for them; (ii) first and second year courses of acceptable quality could be provided for them in the CAATs at a significantly lower cost than increasing the capacity of the universities; and (iii) this function would fit harmoniously with the larger mission of the CAATs.

As noted earlier, concern about (iii) was historically one of the major reasons why the CAATs were not given a university transfer function. However, there is reason to believe that these fears were groundless, or at least overstated. In the U.S., it was not the transfer function that undermined the non-degree functions by making the latter second class activities; but the non-degree functions which undermined the transfer function by contributing to an institutional climate which did not facilitate higher level academic work. The appropriate concern is not that the transfer function would impact negatively upon the non-degree oriented activities of the CAATs, but that transfer might not be viable in an environment that is so dominated by nonacademic activities - lower level occupational training, community service and remediation. Were it to take root, transfer could have a healthy effect on the ambience of the CAATs as postsecondary education institutions. It could also give a strong boost to general education, which by mandate is supposed to comprise about a third of the content in postsecondary programs, but which in most CAATs has become almost negligible. If generally stronger identification with high level study is an important element in the texture of a postsecondary education institution, incorporating a junior college function would probably be a healthy thing for the CAATs.

Factors (i) and (ii) are more problematic. It is not clear that many qualified applicants presently are denied admission to university. In fact, there are widespread concerns of university faculty that admission standards have declined, and it is too easy to get into university. If the main rationale for giving the CAATs a junior college function is that many qualified applicants to university are being turned away because the universities don't have room for them, the validity of this assumption needs to be demonstrated a whole lot better than it has been to date in order to justify that proposed change in the role of the

[1] In regard to formal arrangements under which students may commence their postsecondary studies in a CAAT and subsequently continue their studies in a university, receiving credit by the latter for courses taken in the fomer, there is an important distinction to be made between general arts and science on the one hand, and specific professional or quasi-professional programs on the other. The rationale for such arrangements differs between the two types of study, the former emphasizing general accessibility to university, the latter focussing upon issues involving the development of professional expertise and opportunity for professional practice. As the role of transfer in facilitating general accessibility to university has been addressed in detail in the paper for Vision 2000 by Professor Dennison, that subject will be treated briefly in this section of the paper, our focus being its relation to the more general question of how the colleges might respond to pressures for more advanced training. The next section will address transfer in the context of professional programs.

CAATs.[2] On the other hand, it could be argued that having CAATs perform a junior college function could enable universities to raise their admission standards, with the more marginal applicants beginning their university level studies in a CAAT. This was, after all, the primary argument for initially establishing junior colleges in the United States.

Further, it might be argued that while presently applicants are not often turned away from university, they are admitted under undesirable conditions with respect to excessively large classes, overcrowded facilities, inadequate time for professors to give students the attention that they need, etc. Here again, better information is needed on the difference in capacity between CAATs and universities. It was less than five years ago that CAAT faculty struck over excessive workloads and overcrowded conditions, and workload (and adequacy of space, equipment, and facilities) is still regarded as a major issue by the union which represents CAAT faculty.

The question of whether it would be substantially less costly to provide much of first and second year arts and science in a CAAT than a university is quite complex, and reference will be made here to only the major determinants of relative costs. The most important factors are faculty salaries, teaching contact hours per faculty member, and class size. As of 1985-86, average salary of university faculty ranged from $43,000 to $50,000, except at Toronto and Waterloo where it was almost $55,000 (Skolnik and Woodford, 1987: 23). Average salary for CAAT faculty was about $45,000, so except for a few universities, the the differences were relatively small. Weekly teaching contact hours are typically 15-18 for CAAT faculty in postsecondary programs, and typically 9-12 in university. But while cost per teacher contact hour is higher in the university than in the CAATs, this difference may be offset to a great extent by the tendency toward much larger class size in lower level university courses than in classes in the CAATs, where class size is limited by a contractual workload formula. Moreover, many first and second year university courses use teaching assistants, whose rates of remuneration are substantially less than those of CAAT faculty. The net effect of these factors is difficult to predict, but there certainly are no prima facie grounds for expecting that the cost of serving first and second year students would be substantially less in a CAAT than in a university; it might even be higher in the CAATs.

The problem of comparing costs between CAATs and universities is confounded by the existence of the research function in the universities, i.e. that research is a normal responsibility of university, but not of CAAT, faculty. Because a substantial portion of a university professor's time is devoted to research, the actual instructional cost per university student is significantly less than the apparent total cost per student that is derived by dividing university total operating costs by the number of university students.

For example, it has been estimated that about one-third of direct costs in the university (exclusive of program support and overhead costs) are for research and two-thirds are for instruction[3]. Thus, if universities were to be given more faculty in order to accommodate additional students, only about two-thirds of the cost of the additional faculty should be considered a cost of achieving the increase in accessibility. On the other hand, if the increase in accessibility were to be achieved by adding a comparable number of teachers to the CAATs, it would be appropriate to consider all the costs of the additional faculty as costs of achieving the increase in accessibility. Of course, this difference between instructional and total costs in the two sectors is, to some degree, captured in the difference in normal

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[2]It should be noted that Ontario has a much more accessible university system than British Columbia or Alberta, the only provinces which have junior colleges. In British Columbia, for example, the three universities are all in one small corner of the province, whereas Ontario has many universities widely dispersed across the province.

[3]A recent paper by the Ministry of Colleges and Universities provides the following estimates of the distribution of expenditures of Ontario universities: Instruction 54%, Research 20%, Academic Support 7%, Student Services 2%, Administrative Support 7%, and Plant Operations 10%. See its Analysis of the COU Report, "Financing Universities in North America: Can Ontario Compete?", p. 10.

weekly teaching hours, because the expectation that university faculty will conduct research is one of the major reasons why teaching loads are lower in the universities than in the CAATs.

What is most pertinent to this discussion is the following implication of the difference between universities and CAATs with respect to research: in choosing between increasing the instructional capacity of the postsecondary system by adding faculty to the universities or adding faculty to the CAATs, the value placed upon the additional research output that would result from adding faculty to the universities is an important consideration. In allocating funds to employ additional faculty in the universities, the government would be purchasing additional research capacity as well as additional instructional capacity. If the incremental social value of this additional research were not deemed significant, then, other things being equal, it would probably be more efficient to expand the capacity of the postsecondary system by giving the CAATs a junior college function than by expanding the universities. That way, all the additional resources would go into instruction - assuming no change with respect to the present circumscription of the CAATs role in research. If, on the other hand, the incremental social value of additional research in the university sector were deemed to be high, this would strengthen the case for expanding the universities as a means to achieving the increase in accessibility. The key point is that the government cannot - except by departing from established conventions regarding university autonomy and the nature of Ontario universities - increase the instructional capacity of the universities without some of the resources for that expansion going into research.[4]

The discussion in the preceding paragraphs focuses on the choice between adding new faculty to the universities and adding them to the CAATs. Of course, if some faculty in CAATs would be otherwise underemployed, then it would be more economical to have them teach first and second year university courses than to add new faculty to the universities - if the CAAT teachers are deemed to be qualified to be teaching university level courses. That's an important "if", and the data required to establish it are not available. In aggregate, only about 15 per cent of CAAT teachers have Master's Degrees and only a few per cent have Doctorates - in contrast to the United States where the corresponding figures are in excess of 80 per cent and 20 per cent, respectively. While some who have recently been hired in the CAATs might, in a better academic labour market, have obtained university jobs, it is doubtful that the CAATs presently have sufficient numbers of appropriately qualified faculty to assume a major role in the provision of first- and second-year university courses.

Thus far, we have examined this issue at the aggregate provincial level. The majority of Ontario university students tends to attend universities in their home region. It may well be that there are certain regions where the universities are substantially over-subscribed and the local CAATs are significantly under-utilized. Also, there are urban regions which are served by a CAAT but which do not have a local university. In these cases, accessibility to university could be increased and costs to students reduced if they could do the first year or two of university studies in a CAAT. Thus, it may be that what is appropriate is not a general policy of placing first and second year university studies in a CAAT, but doing this on a selected basis in certain communities.

Another important set of considerations pertains to the fit between student needs and institutional characteristics. Student-institution fit is regarded by many to be the major factor accounting for variation in student retention and academic performance (for a survey of this literature, see Dietsche, 1989). Some students might find the opportunity to begin their university work in the environment of a CAAT less intimidating than a university, and thus, they may find this a felicitous vehicle for the transition from secondary school to postsecondary education. However, the experience in the United States since the 1960s has been just the opposite, with those who begin their postsecondary education in a community or junior college being the least likely to obtain a degree. In the U.S., transfer programs in the community colleges

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[4]In some jurisdictions, universities are quite differentiated with some concentrating primarily on undergraduate instruction and having very limited expectations for research. This is not the case in Ontario.

have had as their major effect, taking students of the lowest academic ability and lowest socioeconomic status, giving them a brief opportunity to experience university level studies of inferior quality, and "cooling them out". Were this to be the outcome in Ontario, such result would hardly justify a major effort at reform of postsecondary education.

Before concluding this section, mention should be made of the General Arts and Science Programs (GAS programs, though they have a variety of names specific to different colleges) which exist now in a majority of Ontario CAATs. Though these programs have several objectives - including training generalists for the workforce and serving as a holding tank while students wait to get into their preferred occupational programs or discover their occupational goals - a major objective of many is to enable students who are not presently admissible to university because of poor secondary school records to gain qualifications for university entrance. In performing this compensatory function, GAS programs are not actually university transfer programs, although some universities give some credit for studies in a GAS program, e.g. one year university credit for two years in a CAAT GAS program. York University, for example, may admit a person who has no Ontario Advanced Credits from secondary school upon completion of one year, with satisfactory marks, at Humber College. In this respect, the GAS programs play a valuable role in providing a second chance for those whose secondary school record does not qualify them for university, and doing so at a modest cost to the student (one year in a local CAAT). This opportunity for a modest cost, second chance, route to university lessens the need in Ontario for formal transfer programs for accessibility purposes.

In this context, it is important to distinguish between two potential roles of the CAATs in facilitating movement of students to university. One possible role - which we have referred to as the junior college role - involves taking students who are qualified for university admission and providing the first year or two of their university level studies in a CAAT. The other, quite distinct, role is that of academic upgrading. This involves taking school leavers who are not qualified for university admission and preparing them for university. It is the latter role which the GAS programs are primarily intended perform.

However, the practical effectiveness of this second route may be limited by the fact that not all CAATs have GAS programs; enrolment may be limited in some of them; and not all universities recognize them. Possibly, the most useful reform with respect to the CAATs' role in university general arts and science would be in formalizing the GAS program concept, and getting all CAATs and universities to subscribe to it.

In conclusion, caution is advised in undertaking a major reform of postsecondary education primarily on grounds of what may be temporary expediency — a reform which is motivated primarily by the anticipation that it will save money, when the evidence regarding those cost savings has not been provided, and may not stand up to scrutiny.

A major change like vesting CAATs with responsibility for first- and second-year university courses should be based upon something more fundamental than perceptions of differences in what may be short term enrolment trends between CAATs and universities, ideally a comprehensive plan for postsecondary education of which the reform in Quebec which involved the establishment of the colleges d'enseignement general et professional (CEGEPs) is a noteworthy example. Ontario has chosen a different model than Quebec, and there is no evidence that the Ontario model is inappropriate to its circumstances, its economic or societal needs. There may, however, be other problems which merit attention, and the next section addresses one potential problem area, that relating to the career paths of professionals.

IV. Credentialism and Professional Career Paths

CAAT and university graduates in the same occupational field are evaluated and rewarded differently in the labour market owing to (i) differences in the specific knowledge and skills attained in their respective educational programs; and/or (ii) differences in non-cognitive traits, such as attitudes, values, and interpersonal skills, and in ultimate potential for subsequent learning and development assumed by

employers to be correlated with educational level. Insofar as differences in career paths of these two groups are due to factor (i), a technical-functional (or human capital) model would explain the differences. Insofar as factor (ii) is the source of the differences, the explanation would lie in credentialism.

Credentialism is a form of statistical discrimination. Some CAAT graduates may have considerable potential for higher level or management roles, and some university graduates may not have such potential. But if on average, there are systematic differences in developmental potential between these two groups, then such statistical discrimination may be rational for employers in that educational qualification provides an economical indicator that can be used, in the first instance, for screening and sorting employees. If credentialism is economically rational for employers, then it is of little avail to exhort them not to engage in the practice or to undertake promotion campaigns designed to improve the image of diploma graduates relative to degree graduates.

While it is methodologically quite difficult to verify the extent to which credentialism, as opposed to technical-functional determinism, operates in the labour market, labour economists have concluded that the use of credentialism is quite prevalent (for a summary, see Blaug, 1985). For example, a study by the author reported that in many large organizations, diploma technology graduates and engineering degree graduates were perceived by employers as having comparable technical skills and initially were placed in the same types of work roles. However, it was assumed that the engineers would subsequently advance to supervisory and management positions - and provisions were made for such advancement in the organizations' human resource strategies - while technologists were expected to remain in jobs similar to their entry level positions, and accordingly were not given comparable opportunities for advancement (Skolnik and McMullen, 1970: 46-49).

The tendency for community college graduates to reach the peaks of their career advancement much earlier than university graduates has been documented for Canada by Anisef et al. (1989: 11). When measured on a Blishen scale of occupational attainment, thirteen years after beginning their postsecondary education, university graduates scored, on average, fifteen per cent higher than community college graduates. However, within only five years of entering postsecondary education, community college graduates were only three per cent below the level that they would reach eight years later; whereas university graduates at the same point in time were about twelve points below the level that they would subsequently reach.

The situation suggested by such studies is that CAAT and university graduates in the same occupational field may enter the workforce at not too dissimilar levels in terms of salary and responsibility, but that subsequently the university graduates are given preference with respect to opportunities for additional training, advancement, and assumption of greater responsibility. In this sense, CAAT graduates may be dead-ended from a longer term career perspective, unless they can obtain a degree. However, generally it is quite costly for them to pursue a degree because they would tend to get credit toward a degree for at most one year of their CAAT studies. The result of such a chain of events is not only that CAAT graduates may be penalized career-wise for their initial postsecondary choice, but also that society may be prevented from achieving the best utilization of the productive potential of many CAAT graduates. Of course, this scenario may not provide an equally accurate description of the dynamics of all occupational fields, and because of the lack of any studies of the longer term career development of CAAT graduates it should be treated as having the status of an hypothesis. However, based upon the available evidence, it seems a plausible hypothesis, even though there are no data available which could be used to indicate the magnitude of the problem, i.e. how many bright, competent, energetic CAAT graduates <u>are</u> dead-ended because of the credentialism barrier. The salient point is that there are not practical career advancement routes for those who would (and perhaps in the public interest, should) pursue such routes <u>if</u> they were available.

Perhaps the most bizarre example of credentialism affecting CAAT graduates is in the field of nursing. Graduates of both CAAT diploma programs and university degree programs write the same exam for professional certification and obtain the same exact professional qualification. However, many job postings indicate "degree required" or "degree preferred", and higher level nursing positions, especially those with

supervisory responsibility, often are open only to degree nurses. As management training is not a major part of the university nursing curriculum, it would seem that the preference for degree nurses at least in part reflects credentialism, i.e. an assumption on the part of employers that degree nurses are more likely than diploma nurses, on average, to possess the personal qualities needed to be an effective leader in the profession.

Another factor which contributes to the strength of educational credentialism is the existence of professional associations. An example of the influence of a professional association on educational credentialism in a field for which the CAATs provide training is that of accounting. Several years ago, the chartered accountants, who represent the highest level of accounting certification (in terms of salary and prestige) made the possession of a degree - but a degree in any field - a requirement for writing the C.A. exams. Since the degree does not have to be in a particular field, it would be difficult to argue that the degree would signify the possession of any particular set of knowledge and skills required for the practice of accounting. But the requirement does serve to exclude CAAT accounting graduates from the highest level of professional certification - unless they could obtain a degree subsequent to their accounting diploma.[5]

A comment on the influence of professional associations on educational programs is in order here. Professional associations have the jurisdiction - sometimes subject to certain legislated constraints - to set the requirements for recognition of the qualifications of individuals who wish to be admitted to their professions, i.e. the responsibility for professional certification. Professional certification is quite distinct from accreditation of educational programs, wherein some agency certifies that an educational program meets certain standards. For example, in the case of medicine, an association of university medical schools accredits medical education programs, and the medical association handles professional certification of (individual) physicians.

However, in some fields, the principal accreditation of educational programs is by professional bodies, e.g. in engineering and dentistry. There are, thus, two different types of bodies which accredit educational programs - professional associations and associations which represent educational institutions. Institutional accreditation (i.e. attesting that an institution as a whole meets established quality standards) is done only by associations of educational institutions. While widespread and important in the U.S., there is little institutional accreditation in Canadian postsecondary education - the only examples being the American Association of Bible Colleges which accredits Canadian Bible Colleges, and the Association of Canadian Commercial Colleges which accredits private business colleges.

Program accreditation in Canada, as noted, is in some cases done by educational associations, and in other cases by professional associations (and in a few cases, like medicine, by both). In a review of accreditation practices in Canadian education, the Association of Universities and Colleges of Canada notes that the distinction between the two models of accreditation of professional programs tends to be "more apparent than real", since the membership of accrediting bodies and their visiting committees is often made up of a mixture of professionals and educators (Houwing, 1979: 2). Even where the accreditation is done exclusively by educators, professional associations have influence on curriculum and standards, because those responsible for professional education programs are normally willing - to a point - to modify their programs in such a way as to enhance the chances that their graduates will be able to obtain relevant professional certification. Whatever form is used for achieving it, a balance of influence on accreditation standards between educators and professionals seems a healthy thing because both perspectives are essential in attaining sound educational programs which are sensitive to, and up to date with, the needs of

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[5]Representatives of the CAATs have lobbied to obtain broader access for their graduates to licensure for the practice of accounting, or at least ensure that access is not further restricted. In a recent letter from the Committee of Presidents of the CAATs to the Attorney General, it is urged that the Public Accountancy Act be revised to permit CAAT graduates to be certified by the Certified General Accountants Association of Ontario, Institute of Chartered Accountants, and Society of Management Accountants (letter from Roy McCutcheon, Chairperson of the Committee of Presidents, to the Hon. Ian G. Scott, Attorney General, May 5, 1989).

professional practice. On the other hand, an approach which gives exclusive, or excessive, weight to just one of these two vital constituencies may not be in the best interests of students or consumers; and if dominated by professional associations, may impose unrealistic costs on educational institutions and/or unduly restrict the flow of new entrants into the profession.

Accreditation of educational programs is underdeveloped in the CAATs. There is no institutional accreditation, nor program accreditation in some major areas, e.g. technology. Insofar as accreditation of professional programs serves an important need in the labour market, this vacuum in respect of accreditation of technology (and other) programs in the CAATs presents an invitation to professional associations to move in. In the absence of their own accreditation mechanisms, the CAATs are vulnerable to overtures of professional associations to accredit their programs, because it is hard to resist the suggestion that these programs should be accredited by someone.

For example, there has been a continuing issue between the CAATs and the Ontario Association of Certified Engineering Technologists and Technicians (OACETT) as to whether OACETT would be permitted to accredit technologist and technician programs. Understandably, the CAATs have been reluctant to grant a professional association the extent of control over their programs and curricula (and thus, their resources) that would be involved if OACETT were to accredit these programs. At the same time, it seems clearly to be in the interests of society, the profession, and of students who are training to be technologists and technicians for these programs to be accredited. The best solution to the problem would be for educators to take the lead in developing an accreditation mechanism, for example, through a provincial, or ideally national, association of "schools" of engineering technology which would provide for input from OACETT and others external to the CAATs, but which would not be dominated by external groups. OACETT would still be able to exert the extent of influence on curriculum and program requirements as is appropriate to its expertise, professional responsibilities, and legitimate interests in the process, but its interests and perspectives would be moderated through the influence of educators.

There is one way in which the actions of professional associations can have even greater implications for the CAATs than merely influencing curriculum content and diploma requirements. This is when a professional association makes a degree a requirement for professional certification. A case where this happened not too long ago was in regard to physiotherapy. At least one CAAT had a program for training physiotherapists, but as a result of the insistence of that professional association on the degree as a requirement for practice, the college had to give up its program - actually it assisted in the transfer of the program to a local university. There are unconfirmed reports that the Society of Management Accountants also may shortly make the degree a requirement. Were this to happen, the result might be to reduce the opportunities for CAAT accounting graduates, and hence the demand for enrolment in CAAT business programs, with a corresponding increase in the demand for places in university programs.

The pressure from professional and quasi-professional groups to raise their educational requirements as they evolve could create a situation wherein training for "new" professions begins in the CAATs, and then moves to the university when the profession reaches a level of development for which a degree is thought to be essential. Though this process will at times create major disruptions for the CAATs (and of a different kind for the universities), it is not necessarily a bad thing if one believes that the primary focus of the CAATs should be on responding to new societal needs, and flexibly altering their program mix over time. Also, the process has natural limits. It is not viable for a professional association to require the degree until the majority of its members already have the opportunity for degree level training - as was the case with physiotherapy - for otherwise the professional association will lose its major constituency. In addition, the universities must be willing (and able) to provide the additional places for professional education, and, in fields where there are major public interest issues, the government must approve the change.

Nursing illustrates a field where presently, in spite of the stated preference of the professional association for making the degree a requirement for entry, the other conditions necessary to effect this change are not met. The nursing case raises the question also as to whether there may be other ways of accommodating a profession's desire for a degree requirement than simply transferring educational

responsibilities in total from CAATs to universities. In the case of nursing, these options are discussed in a recent paper by the author (Skolnik, 1989), and more general comments on that issue will be provided in the next two sections.

This section concludes by returning to the problem of dead-ending of CAAT graduates in labour market because they do not possess a degree. What can be done about this problem?

First, it should be noted that not all CAAT graduates may be dead-ended - we really need more research on the longer term career development of CAAT graduates, not just their initial employment experience which has been the focus of most research on employment of CAAT graduates. Some advance even in the face of the degree hurdle. Second, not all may wish to advance to the highest levels within their organizations, or like many university graduates, some may not have the other talents necessary for advancement.

For those who have the talent and desire to advance, e.g. within engineering or nursing fields, there should be an easier way to get a degree than virtually having to start over or get at most one year's credit toward a degree. That substantial advanced standing in the corresponding university degree program is reasonable in many cases is suggested by the fact that CAAT diploma graduates can go to many U.S. universities and within one year obtain a professional degree. While these may not be the most prestigious U.S. universities, neither are they "degree-mills". Right here, Lakehead University has developed a special stream in which technology diploma graduates of CAATs and comparable institutions in other provinces can get about half the credit required for an engineering degree.

What is needed to address this problem is first for CAATs and universities jointly to recognize that there is a problem; and that it is in the public interest for CAAT and university programs in fields such as technology, business, and nursing to be structured in such a way that CAAT graduates can proceed to university studies and meet degree requirements within a reasonable period of time. What is a reasonable time? I think the goal should be about the full time equivalent of one to one and a half years, but obviously this is a matter for the two sectors to negotiate. A good way to formulate the question would be for the universities to say what changes need to be made to the CAAT curricula so that CAAT graduates could meet university degree requirements in a year to a year and a half of full time study.

Of course, many could not pursue the degree on a full time basis, and provision would have to made for part-time study (which presently is quite limited in professional fields in Ontario universities[6]); and as is appropriate with mature professionals, some consideration should be given to state of the art models for granting some credit for relevant professional experience. The objective here should not be to proliferate watered down university degrees, but to find the limits of transferability of credit for professional education that are consistent with maintaining integrity of degrees. A major constraint though is that universities are understandably reluctant to grant credit for academic work over which they have no control and thus for which they cannot guarantee quality. In pursuing this initiative, then, the universities would naturally expect to have considerable say over the corresponding curricula in the CAATs, and there may be some in the CAATs who would not welcome such an intrusion of the university into their affairs. Should the subservience of the CAATs to the universities become a major hurdle, developing degree programs in the CAATs - discussed in the next section - is another approach to achieving the objective of enabling CAAT diploma students to progress to the degree, though a different sort of degree.

Unlike the case with general arts and science, discussed in the previous section, expanding capacity in the universities is not a practical option for addressing the need for professional development which is the subject of this section. Training for the lower and middle levels of professional job ladders is a major and

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[6]For example, a library technician who cannot afford to enrol full time in a library science program can never advance to librarian status, as no Ontario university offers this program on a part-time basis.

natural function of the CAATs. What is needed is a mechanism to enable some of the graduates of those CAAT programs to advance in their training and careers. An alternative to having CAAT graduates move on to a university at some time after completing their programs in the CAATs is to establish joint programs wherein CAAT and university studies (and credentials) are pursued simultaneously. The concept of joint programs is considered in the next section. Another alternative for addressing the credentialism problem is what Stuart Smith has called the 'joint venture' model. This model, which is also discussed in the next section, could enable CAAT students to do credit work toward a university degree either simultaneously with or after completion of their studies in the CAATs.

V. Polytechnic Education, Joint Degree Programs, and Joint Ventures

A concern that has been voiced about postsecondary education in Ontario with increasing frequency in recent years is over the lack of polytechnic education and the negative implications that this gap in our postsecondary mosaic might have with respect to our international economic competitiveness (the thrust of public statements, for example, by Stuart Smith, former Chairman of the Science Council of Canada; Walter Pitman, Director of the Ontario Institute for Studies in Education and former President of Ryerson Polytechnic Institute; and Robert Gordon, President of Humber College of Applied Arts and Technology).

A major problem in addressing such statements of concern is the lack of clarity and consensus as to what is meant by the term, polytechnic education. Indeed, there are few terms in postsecondary education which are as ambiguous and open to such widely varying interpretations. Much of the confusion surrounding the recent use of this term in Ontario arises from the fact that it has been borrowed from Europe where it is associated with a particular type of institution, the polytechnic institute; whereas those who have employed the term in Ontario have tried to use it to define a particular type of education independently of the particular institution(s) which might provide it.

The term, polytechnic, has its modern origins in Europe, particularly the United Kingdom where the first institutions that were called polytechnic institutes were established in the late nineteenth century - the first generally said to be Quentin Hogg's Regent Street Polytechnic in 1882 (Pratt and Burgess, 1974: 17). Literally, a polytechnic is a school or institute which provides training in various technical subjects, as opposed to a monotechnic, which provides training in just one technical area. The contemporary U.K. polytechnic institute, of which there are about thirty, is characterized by offering a variety of types of training, of a variety of durations, in a variety of technical fields, at a variety of levels of sophistication, for a variety of formal qualifications.

Much of the activity of a U.K. polytechnic institute is essentially the same as that of an Ontario CAAT. However, the corresponding institutions in the two jurisdictions differ in two important respects. First, the formal certification of qualifications upon completion of programs in the U.K. polytechnics is granted by national certification bodies - such as the Council for National Academic Awards (CNAA), the Technical Education Council (TEC), or the Business Education Council (BEC) - rather than by the institutions themselves. Thus, there are national standards and external control of academic programs.

The second difference is that, under the auspices of the CNAA, polytechnics provide courses of study leading to degrees - Bachelor's, Master's, and Doctorates. These degrees are awarded by the CNAA, although recently it has been recommended that at least some polytechnics be given the right to grant degrees on their own (Cantor, 1989: 311). The degree work in the polytechnics is quite differentiated from that in the universities in that the former has a strong applied focus and a strong orientation to the needs of the professions, industry, and commerce (for a detailed comparison between polytechnic institute and university degrees, see Matterson, 1981: 30-37). As in other European countries, there is a separate educational stream for technical and applied studies, which while parallel to the degree structure in the universities, is quite distinct in orientation and is evaluated by different standards than those normally applied in the university sector. For example, Matterson reports that research and scholarship in the

polytechnics normally accounts for 10-20 per cent of staff time, in contrast to 50 per cent in the universities, and is undertaken mainly to support teaching rather than as a primary activity (p. 34).

Thus far, the calls for polytechnic education in Ontario have been at a quite abstract level. None of its advocates has yet spelled out just how what is called polytechnic education would differ with respect to substantive curricula from what is now offered in CAAT diploma programs, i.e. just what is the nature of this purported gap in the Ontario postsecondary education mosaic. The CAAT diploma technology programs are thought to be on the cutting edge of technological practice. If that is the case, it is not apparent just what would be missing from them that is included in the curricula of the European polytechnic institutes. It is possible that the differences between the CAATs and the European polytechnic institutes lie only in the titles of the respective institutions and the educational certificates which they confer. On the other hand, it may well be that the higher levels of education provided by the European polytechnic institutes are substantively different from the present CAAT diploma programs; but that conclusion could follow only from detailed comparison of curricula, not just comparison of titles. To our knowledge, such comparison of curricula has yet to be undertaken.

In the absence of explication of the curriculum reform that might be needed, the purported polytechnic education needs of Ontario have been described in terms of one of two simple heuristics, each of which has quite different implications for educational reform. One is to view polytechnic education as some sort of hybrid between what is offered by the universities and what is offered by the CAATs. The corresponding phrase which one sometimes hears is that polytechnic education "would bridge the gap between the more theoretical emphases of the university and the more applied emphases of the CAATs". This phrase has a pleasant ring and politically attractive policy implications. It would preserve the present balance between universities and colleges, and its implementation might not require any new resources - just better use of those which universities and colleges already have - or such additional resources as are needed would be distributed to both universities and CAATs. There are some practical questions, however, as to whether a viable hybrid educational model could be developed; whether there is a need in the labour market for a vast increase in the number of joint college-university programs that are implied by this view of polytechnic education; and whether colleges and universities could work effectively together on such a scale.

The alternative view of polytechnic education is that it connotes some sort of advanced version of the present CAAT diploma programs, like adding a Cadillac to an educational production line which presently turns out Chevrolets.[7] The European experience lends more credence to this view of polytechnic education than to the hybrid model, as there are well developed streams there of advanced technical education beyond the diploma level. In contrast, as noted in the previous section, in Ontario there is no opportunity for recognized study of a technical nature beyond the diploma level - except possibly at Ryerson Polytechnic Institute, though there are seemingly interminable debates as to whether Ryerson is now a university or a technical institute.[8] Thus, in Ontario, after attaining a diploma, an individual must cross over to the university stream if he or she wants to pursue a higher level of educational certification. In the U.K., a

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[7]While evocative, the analogy may be misleading. The Chevrolet and Cadillac draw upon the same technology and are regarded by many as almost the same under the skin, though differing greatly in appearance and amenity (and status). The automobile analogy alerts one to the problem in this alternative formulation of polytechnic education that was intimated on the previous page: just what is it that differentiates a degree program in a polytechnic institute from a diploma program? If it is the inclusion of theoretical content of the type covered in university engineering and science courses, then this second view of polytechnic education is essentially the same as the first. Or, is there such a thing as a more intensive and sophisticated treatment of applied material than is normally provided at the diploma level? What would be helpful here is an in-depth comparison of the curricula of the degree programs with the diploma programs of the U. K. polytechnics.

[8]In its Vision 2000 brief on polytechnical education, the Ontario Association of Certified Engineering Technicians and Technologists asserts that at one time it seemed that Ryerson might provide a suitable model for advanced education in "practical applied technology", but that the thrust of Ryerson's programs has changed in the direction of the typical university engineering model (p. 5).

diploma graduate of a polytechnic institute can continue in the polytechnic stream to a technical Baccalaureate Degree, and even to a technical Master's and Doctorate.

The most obvious and direct way of establishing in Ontario the type of advanced technical education that the polytechnics provide in the U.K. would be to model the U.K. system. This could be done through the establishment of new polytechnic institutes in Ontario which are designed along the lines of the U.K. institutes. However, as that seems an inappropriately extravagant approach, particularly in a period when funding for postsecondary education is so constrained, a more prudent approach might be to transform some CAATs into U.K. type polytechnics. The need for advanced technical study is unlikely to be of such magnitude as to justify converting all CAATs to polytechnic status. Moreover, the goal of attaining the critical mass of sophisticated expertise required to make advanced study worthy of degrees might be best served by concentrating resources for such level of study in a few institutions, perhaps one or two in Southern Ontario, and one each in the Eastern, Western, and Northern regions. This would be in keeping with the U.K. system in which the vast majority of technical institutes and related institutions are not polytechnics. There would be no need for these designated CAATs to give up their non-degree training or other functions, as the essence of a polytechnic is to encompass a very wide range of activities, types of students, and programs - though some move toward concentration of focus might be in the interests of efficient management. The degree programs would still comprise a relatively small portion of college activity. In the U.K. polytechnics, the majority of students are not pursuing degrees. Alternatively, if a provincial body analogous to the CNAA were established, all CAATs might be given the opportunity to have certain of their programs evaluated by it for technical degree status.

A variant of the first view of polytechnic education has been put forward by Stuart Smith (1989). Smith views polytechnic education as "technology taught in a broad context and combined with liberal arts". This differs from the view which focuses on technical training and emphasizes the integration of the university's theoretical grounding in science and engineering with the more applied, hands-on, learning offered by the CAATs. Smith appears to be advocating a more substantial liberal arts component than is characteristic of either university engineering or CAAT technology programs in Ontario.

In order to overcome the obstacles to joint programming between universities and CAATs, Smith suggests the establishment of (a) new institution(s) to provide polytechnic education. However, in order to maximize flexibility and minimize costs, he proposes that the new institution be primarily an administrative entity which would have neither campus nor faculty. It would buy courses from universities and CAATs and put them together in such a way as to offer coherent programs of polytechnic education. While similar to the joint program concept, Smith's joint venture model would place no demands on universities and CAATs to negotiate the complex agreements which would be necessary to effect joint programs.

There are a number of newer institutions in the U.S. which operate primarily through "brokering" courses of established colleges and universities, as Smith proposes for Ontario. These institutions are very cost-efficient, flexible, and responsive. The author has studied one such institution in the Boston area which offers accredited master's programs in Education, Counselling, and Social Work. It has a strong enrolment demand, even though its tuition fees are close to $10,000, and its graduates are highly regarded by employers and graduate schools. The latter is not surprising since most of the students' course work is done in leading universities in the Boston area. The institution does employ a small number of its own faculty to advise students, design and monitor programs, evaluate students, and offer a few courses which are intended to facilitate integration of student learning.

The model which Smith proposes is quite flexible, and it need not be tied to his particular view of polytechnic education. For example, there might be some concern as to how much of the curriculum could be devoted to liberal arts while still leaving sufficient time to cover the necessary technical material.

Further, Smith's joint venture concept could be integrated with an Ontario equivalent of the CNAA model. The corresponding provincial body - rather than local "joint venture institutions" - could be the body

which awards degrees upon the completion of a prescribed set of university and CAAT courses, with students having the entire spectrum of Ontario universities and CAATs from which to choose for their coursework. Such an approach could address not only the polytechnic education needs that are the subject of this section, but also the degree completion needs that were the subject of Section IV, i.e. the provincial body could award degrees to CAAT graduates upon completion of a prescribed set of university courses.

The major drawback of Smith's joint venture concept is that it would require the province to establish an additional degree-granting institution, or degree conferral body. As will be discussed in Section VI, Ontario has for many years had a policy which strictly limits the extension of degree granting authority to new institutions. Here we might note only that one of the major reasons for this reluctance to allow new degree granting institutions is concern over diverting resources from established universities. In this respect the beauty of Smith's proposal is that the new institution would require very little in the way of resources, and the proposal would increase the demand for the services of the existing universities.

These two views of polytechnic education, then, differ both with regard to underlying conceptions of what constitutes polytechnic education and the organizational means for achieving it. While it is difficult to say which of the conceptions of polytechnic education is more sound pedagogically and more appropriate to Ontario's labour market needs, the (U.K.) advanced technical education model would seem to have certain advantages over the hybrid college-university model. For one thing there are many jurisdictions where the former model has been in existence for quite some time and seems to work, whereas no jurisdictions that we know of have institutionalized the joint program model - though, as noted, there is some use of the joint venture model in the U.S.

Further, there are major obstacles to inter-institutional collaboration of the sort required by the joint program (as distinct from the joint venture) model, and in spite of frequent exhortations to do so, few joint programs between CAATs and universities have been developed. A major effort of will is required to overcome even smaller organizational boundaries, as is testified by the Herculean effort usually required to establish even inter-departmental programs within most universities and colleges. There would likely be a confusing division of authority and responsibility which could paralyze decision-making and make it quite difficult for students to get effective advising. There would be problems of harmonizing policies toward students and getting agreement on standards, and likely problems with respect to allocation of facilities and funding.

A more serious drawback of the joint program model is that university values would likely have a dominant steering effect on the character of the programs, making the programs more like those traditionally found in the university and less like the distinct but equally demanding technical programs that are sought.[9] Even in the U.K., with its distinct stream for advanced technical studies, there has been perennial concern over 'academic drift', the phenomenon in which the polytechnic programs become more like traditional university programs in character, focus, and content - though on the whole, academic drift has been pretty well contained there. The more what are supposed to be programs that are not of the type traditionally found in the university are integrated into the university milieu, the more academic drift is likely to occur - as some would say has occurred in regard to Ryerson, as that institution became more integrated organizationally and culturally into the Ontario university community.

This is not to deny the value of joint programs between CAATs and universities, insofar as it is possible to develop them. But joint programs are unlikely to address the purported need for advanced technical training of the type provided through polytechnics in the U.K. There may be areas where joint programs

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[9]Even when combined in a single institution, integration of college and university programs has proved difficult to achieve. Except in Sweden, the "university-college" institutional type has been an unstable institution, and where it does exist the two types of programs tend to be separate and concerns are often heard that the college programs are too academically oriented.

between CAATs and universities would be highly desirable, but these should be seen for what they are: (i) ways of injecting more applied learning experience and drawing upon the hands-on expertise of the CAATs in programs that nevertheless conform to the norms of the university - or else the universities would not be giving their own degrees for them; and (ii) an alternative to structuring postsecondary programs in such a way that CAAT diploma graduates are given substantial advanced standing in the corresponding degree programs in the universities. In regard to the latter point, the joint programs could be seen as accomplishing in a concurrent mode what the strategy outlined in the previous section would accomplish in a sequential mode.

In contrast to the orientation of the advanced programs in the U.K. polytechnics, the joint program model would involve the maintenance of the hierarchical relationship between the university and the CAAT because the university degree would be the end goal of the program, and thus the university would have the ultimate authority over program standards and content. As such, the norms of the university in regard to program standards would likely prevail, though the universities involved would be under constant pressure to accommodate those standards to the needs of advanced technical education. While the two sets of norms are different, one is not necessarily inferior to the other but the perception that such is the case would likely be fuelled in the process of interaction over program content.

VI. Post-Diploma Training and Degree Granting

Except for the adoption of the U.K. polytechnic model, the strategies for involving the CAATs in more advanced training discussed thus far have in common that they would necessitate coordination between universities and CAATs at the program level to ensure that academic work done in the CAATs would mesh with work done in the universities. Some of the drawbacks and problems involved in such attempts at coordination between the two sectors have already been noted. Because of the difficulties inherent in such attempts at coordination between the two sectors, it is useful to note briefly alternatives for more advanced level training in the CAATs which are not dependent upon cooperation from the universities. In addition, because of its novelty in Ontario, a few additional comments are in order on the concept of some CAATs being transformed into polytechnics and awarding technical degrees.

At the most general level, there are three ways in which the CAATs might offer more advanced training independently of the universities: (i) through increasing the rigour and sophistication of curricula in diploma, and possibly certificate, programs; (ii) through post-diploma programs which offer more advanced training in the areas of specialization of the corresponding diploma programs; and (iii) through extending diploma programs to the degree level, i.e. offering degree programs with an applied focus which would differentiate them from the degree programs offered by the universities.

Regarding the first variant, it should be said that the public expectation is that CAAT postsecondary programs are, as a matter of course, continually adjusted so that they provide state of the art training. While there is little formal evaluation of programs by agencies external to the colleges, experts from the relevant fields of practice are involved in program advisory committees which monitor the currency of curricula. Thus, there is no reason to doubt that at any given time diploma programs are at a level of rigour and sophistication that is consistent with current notions as to what constitutes state of the art diploma level training - though some formal external validation of this fact might be useful from time to time. But it seems reasonable to assume that variant (i) is already institutionalized into college operations.

So far as variant (ii) is concerned, it can be said that colleges offer some post-diploma studies; that this is a relatively small component of college activity; and that most post-diploma activity is quite short term in duration, i.e. less than one year. Further, the impression is that as part of their innovative and aggressive product development and marketing strategies, several colleges have explored the market for post-diploma training with some vigour and have found it to be quite limited.

The likely reason why this market is limited is that, in a society which places such great weight on formal credentials, few individuals are willing to invest heavily in a program of study which does not result in obtaining a recognized credential. Thus, a CAAT diploma graduate would be far more likely to invest an equivalent amount of time in pursuing a first university degree, which represented much less advanced training, than in post-diploma studies which represented a more advanced level of training. This is not to say that selected post-diploma courses and programs might not be of substantial benefit and well subscribed in certain instances. Certainly more information about the nature and extent of post-diploma courses and programs currently offered by the CAATs, including information on the characteristics of those who enrol in them, their value in the labour market, and on the likely potential for expanding activity in this area, would be useful to have. However, the potential for the CAATs to impact upon the skill levels of the Ontario workforce through post-diploma courses and programs is probably quite limited, and for that reason other strategies for utilizing the CAATs for more advanced level training should be considered.

Insofar as a credential for more advanced training provided by the CAATs is important - and I suggest that the reality is that it is quite important - two types of credential might be considered. One would be a new credential awarded by the CAATs which would be analogous in its relationship to the diploma to what the Master's Degree is to the Baccalaureate. It is difficult to think of what an appropriate name for such a credential could be. Moreover, it is doubtful that many students would be attracted to a program which gave such a credential until such time as the new credential attained some status and currency in the labour market. Over the many centuries during which the degree has been the dominant currency in the labour market, numerous attempts have been made to establish alternative credentials which though different from the degree would confer comparable status and earning power. These attempts have been unsuccessful, and the degree continues to reign supreme at the top of the hierarchy of credentials. Thus, it seems doubtful that the CAATs could be successful in conjuring a new credential which would rival the degree. (In the U.K., under the auspices of the CNAA, nationally recognized credentials - the Higher National Certificate (HNC) and the Higher National Diploma (HND) - were developed prior to the recognition of work done in the polytechnics for technical degrees. These qualifications acquired a good deal of prestige and labour market value. However, (i) they still used the terms, certificate and diploma; (ii) their stature arose in no small part from the stringent process of national quality control to which they were subjected; and (iii) it was still deemed necessary in the U.K. to introduce a degree stream for technical education which was parallel to that in the universities. The U.K. experience suggests that while a higher level of diploma for technical studies in Ontario might be a feasible option in the short term, ultimately some type of degree beyond the diploma would be necessary to provide sufficient stature to make advanced technical education viable.)

The implication of the foregoing observations is that if the CAATs are to get into more advanced level training in a major way independently of the university, they will need to award degrees, not the same degrees as universities - e.g. Bachelor of Applied Studies or Bachelor of Technology - and, as noted earlier, possibly only some CAATs and only in a limited number of fields, but degrees nevertheless.

There are two major obstacles to the CAATs, suitably transformed into polytechnics, awarding degrees, one political and the other practical. The political obstacle is an historic orientation in Ontario toward very restrictive control of the right to grant degrees (summarized in Skolnik, 1987).

In general, there are two philosophies regarding the regulation of degree granting. One is to allow relatively easy entry for institutions into degree level education, and then to rely on accreditation and the market to grade the quality and relative value of degrees of different institutions. This is the approach followed in the United States. The other is to assume that the quality and value of degrees will be maintained if the authority to grant degrees is strictly controlled and entry is very difficult. This is the approach followed in Canada, and most strictly of all in Ontario. In fact, it is assumed that this approach will be so effective in ensuring the quality of degree education that there is no accreditation or regular external evaluation of most baccalaureate programs in Ontario universities.

Under the *Degree Granting Act* in Ontario, an institution can acquire the authority to grant degrees only through an Act of the Legislature, and it has been the policy of successive Ontario governments over

the past twenty-five years not to extend the authority to grant secular degrees to any additional institutions. The only exceptions have been Ryerson Polytechnical Institute, which in 1971 was authorized to grant bachelor of technology and bachelor of applied arts (and later, bachelor of management studies) degrees; and the Institute for Christian Studies, which after many years of lobbying and unsuccessful attempts to get an affiliation with an Ontario university, got the right in 1983 to grant a secular master of philosophical foundations degree. The present Ontario policy on degree granting is now being reviewed by the Ontario Council on University Affairs, and the Council of Ontario Universities has urged that this policy remain as it is, or be made even more restrictive. Suffice it to say that any attempt by a CAAT to offer restricted degrees in selected fields would have to overcome awesome weight of tradition, mind-sets regarding the the original vision of the role of the CAATs, and strong opposition from the universities. On the other hand, if the new CAAT degrees were to be clearly differentiated from university degrees, restricted to a few appropriately designated institutions, and subject to effective quality control, the traditional arguments against intemperate proliferation of degree granting institutions would not be applicable - though one could expect to hear them just the same.[10]

The practical obstacle is that to make a plausible case for the authority to grant degrees, the CAAT-polytechnics would have to demonstrate that they have the appropriate resources, of which qualifications of faculty would likely be the most important. If anything close to the traditional criteria for assessing the competence of faculty to offer a degree were applied, the CAATs would certainly fail to make a persuasive case. What are paramount in these criteria are degree levels of faculty and their research records and publications. Since these have not been criteria in hiring CAAT faculty and research has not been part of their jobs, it is doubtful that the résumés of those faculty would meet the conventional norms for degree granting qualification.

Of course, for the type of applied degrees that the CAAT-polytechnics would wish to offer, the traditional university criteria for assessing competence of faculty are not appropriate and other criteria would have to be devised, criteria of the type used in the U.K. by the CNAA. It is probable however, that even with more appropriate criteria, CAATs would still be deemed to fall short, because they have not heretofore been engaged in the level of training that is envisaged here.

Thus, for some CAATs to be transformed into polytechnics and obtain the authority to grant degrees might necessitate that they hire a substantial number of new faculty with more appropriate qualifications - not only in the program areas for which they might seek to grant degrees, but also in the general arts and science support areas which would provide courses that augment those of the specific program content areas. It is impossible to say just how much the profiles of faculty in the CAATs would have to change in order to satisfy the perceived requirements for degree granting, but likely some change would be required. A further practical obstacle might arise from trying to incorporate the appropriate workload conditions for those faculty who are involved in degree programs into the rigid system-wide workload formula which exists in the CAATs.

None of these obstacles to a new system for granting polytechnic degrees would arise in the case of Smith's joint venture concept. Whether implemented through establishing new institutions or through the establishment of a provincial CNAA-like body, the quality of degree credit courses would be assured as the courses would be those of the existing universities. It would be necessary that a new institution of this type have a governing board that is capable and credible in regard to ensuring the quality of the composite

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[10]While the layman might assume that there are well established criteria which a program must meet in order to qualify for a degree, such is not the case. What constitutes degree level study is essentially what institutions which have the authority to grant degrees are willing to put their impimatur on, and there is considerable - but, of course not unlimited - variation in the nature of the learning experience which different institutions deem necessary for a degree. The determination of what constitutes a degree is thus to at least a considerable extent a matter of politics. For a discussion of this issue, see Skolnik (1987: 57-58).

programs for which its degrees would be awarded. This could be achieved by having a sufficient number of the board members drawn from Ontario universities.

VII. Towards the Development of Policy

We have identified six ways in which the college system might respond to pressures for more advanced training:

I. The provision of first and second year university general arts and science courses by the CAATs.

II. The structuring of university and CAAT studies in related professional and quasi-professional fields in such a way that CAAT diploma graduates can move to the corresponding university degree programs with a maximum of advanced standing.

III. The structuring of university and CAAT studies in related professional and quasi-professional fields in a joint program mode, with some of the student's studies in each sector being done concurrently, and the student receiving a degree (in addition, perhaps, to a diploma) at the conclusion of her or his studies. Option III differs from Option II in that the CAAT and university studies would not be sequential, but done concurrently.

IV. The provision of courses of study leading to a technical degree in a number of CAATs which would be designated for upgrading to the status of polytechnic institute, along the lines of the U.K. polytechnic model. Such degree programs would be independent of the universities. The technical degrees could be awarded by the institutions themselves or through some provincial certification body analogous to the CNAA in the U.K.

V. The provision of post-diploma courses and programs by the CAATs which may or may not be recognized through some new type of certificate or diploma.

VI. The implementation of Stuart Smith's joint venture concept, through the establishment of a provincial institution, or institutions, which would grant degrees on the basis of studies completed in both existing universities and CAATs.

Option I would serve very different sorts of objectives from the other options. It would not address concerns about technical, professional, or polytechnic education, but instead respond to more general issues of accessibility to university, expediency, and costs. Given the absence of compelling educational or labour market arguments for this option, there is not a lot to commend it. In itself it does not address needs for more advanced technical education, and pursuing it may divert effort, resources, and attention away from other options which do address those needs. Moreover, the experience of the U.S., where in spite of a major national commitment to such transfer programs, they have not been successful, suggests that this option might result mainly in 'cooling out' students of lesser academic ability and lower socioeconomic status rather than facilitating their entry into university. A more appropriate effort in this area would be to enhance General Arts and Science Programs in the CAATs, and formalize their relationships with all universities so that students who wish to attend university but presently do not qualify can obtain the necessary qualifications.

Option V likely has quite limited potential because of the importance of formal and widely recognized credentials. More information is needed on the nature and extent of such current post-diploma programs, the demand for them, and their stature in the labour market. In certain instances, they may be quite useful, but, by themselves, they do not constitute an adequate response to the needs for more advanced technical training.

Options II and III are quite similar in intent and outcome, but they differ significantly in regard to process. Joint programs place enormous demands upon institutions for coordination and management, and for

that reason, Option II is probably preferable to Option III in regard to facilitating the movement of CAAT diploma graduates along career ladders.

However, it is difficult to see how Option II could contribute effectively to the development of what is connoted by the term polytechnic education. The choice for polytechnic education would seem to lie between Options III, IV, and VI. There appear to be quite compelling reasons for preferring Option IV to Option III in this regard, if Ontario is to make the concept of advanced technical education a vibrant, authentic reality. However, the idea of additional institutions granting degrees, or offering courses of study leading to degrees independently of the universities, would represent a significant departure from tradition in Ontario and is therefore likely to encounter stiff opposition. By comparison, Option III is likely to encounter little opposition in principle - indeed it will likely attract the same unequivocal hosannas as motherhood used to; the problem is that after the homage is paid to it, its development is likely to get bogged down in organizational impediments, and it is unlikely to produce the equivalent scale of benefits as Option IV.

Option VI, while possibly the most revolutionary of all, would be the easiest to implement because it would require the least change or accommodation on the part of universities and colleges. Further it would provide an effective framework for addressing both the needs of degree completion discussed in Section IV, and the needs of polytechnic education discussed in Section V. While linked by Smith to a particular vision of polytechnic education, the concept is sufficiently flexible to accommodate alternative visions of polytechnic education. Another attractive feature of this option is that it would not pit university against CAAT in a struggle over resources and educational values in the way that Options III and IV might. Apart from its novelty, the main sticking point of this option likely lies in the idea of an additional degree granting entity in Ontario.

While in principle, all the above options could be pursued simultaneously, in practice there are likely to be difficulties in doing so because some options emphasize closer integration between the CAATs and universities, while others would reinforce the present separation. It would probably be quite difficult to simultaneously undertake major policy initiatives, one of which pushes the two sectors closer together, while the other maintains the separation between them. Should that be the case, it is suggested that Option IV or VI be given the higher priority, both because the cultures, historic traditions, and institutional arrangements which support separation between the two sectors will be difficult to overcome, and because in the long run Options IV and VI would seem likely to hold greater promise than the other options. Of the two, Option VI is perhaps the best single option, because it can address both the needs of degree completion and polytechnic education (a point that is repeated because it seems so worth emphasizing).

Whichever options are preferred, the development of the CAATs role in more advanced training would be facilitated by, if not require, better provincial coordination between the two sectors than has occurred to date. The plain fact is that presently there is virtually no mechanism for provincial coordination between Ontario's two sectors of postsecondary education. Yet if, for example, it was decided to offer the first year or two of university studies in CAATs, or develop system wide criteria for granting advanced standing toward degrees for diploma work done in CAATs, it would be imperative to have some agency which could take an overview of the two sectors as a whole. Extensive development of joint programs between the two sectors could raise sticky financial issues which might require adjustments of the respective funding formulas for the two sectors. Indeed, if joint programs were something that the government wanted to encourage, it might wish to provide an incentive to institutions by enhancing the funding credit in each formula for students who were registered simultaneously in each sector. If Option IV were to be pursued, the fact that both sectors would be providing degree programs would make it important to have a mechanism for ensuring that unnecessary duplication did not occur and that sharing of facilities or staff could be achieved where that would be beneficial. While Option VI avoids the need for the CAATs and universities to integrate their programming, some coordination would be necessary to enable a third party to mesh together course offerings from the two sectors in coherent programs and to ensure that the resulting programs were credible to both universities and colleges. At a more general level, we have probably

reached a point where it is dysfunctional to plan the development of each sector totally independently of the other.

An obvious response to these issues would be to replace the Council of Regents for the CAATs and the Ontario Council on University Affairs by a single advisory council on postsecondary education. While there is something to be said for this idea, there are also arguments against it. Given the different constitutional stature and responsibilities of these bodies, the differences in cultures, and the considerable amount of important work which each body has to do that does not have any significant implications for the other, amalgamation of the two bodies might not be a prudent approach. However, it would make sense to establish a permanent advisory council on postsecondary education whose mandate would be to consider issues that involve or have implications for both sectors, and to make recommendations - directly to the Minister - for the over-all development of postsecondary education in Ontario.

Besides choosing among the various options with respect to models for development of more advanced training, it might be useful to establish a priority with respect to program area. This would be particularly important if Options II or III were selected, but also in regard to Options IV and VI, because the amount of detailed work to be done would be considerable and it would be quite difficult, if not impossible, to tackle all relevant program areas simultaneously. Moreover, the first program field where the arrangements for any of these options were developed could be looked upon as a model for other program areas, thus helping to generate the necessary commitment for making the first such initiative successful. Concentrating on one program area would be useful for working out the details of and debugging the selected option(s), and in the process learning lessons that could be applied subsequently to other program areas.

As the primary pressure for more advanced level technical training appears to be rooted in concerns about the needs of Ontario industry in competing internationally in fields related to technological development, the priority for development of the selected option should be in one of the major areas of technology. Consultation with relevant experts in education, government, and industry would be necessary to determine which particular area of technology education would best serve as target area for initial implementation of the appropriate option.

Though recently there has been much interest in some type of rationalization of nursing programs between colleges and universities, nursing would not be a good field for a pilot project to refine and develop one of the options presented in this paper. To be sure, the present structure for nursing education in Ontario is bizarre and probably in need of major reform; and one of the options outlined above might provide a suitable model for such reform. By all means, some consideration should be given to addressing the types of issues and anomalies in nursing education which were pointed out in the author's paper on nursing education (Skolnik, 1988).

However, nursing education is a special case, and many of the issues associated with it are quite distinct from the general issues which this paper has addressed. For example, it is the only occupation for which training leading to the same exact professional qualification is provided by both CAATs and universities. Further, unlike most other occupations for which the CAATs provide training, there is presently a strong movement within the profession to require a degree for entry into the profession. By contrast, while an engineering degree may offer better career prospects than a diploma in engineering technology, there is no suggestion that technologists be prevented from obtaining employment (as technologists) if they do not have an engineering degree. In most of the fields to which the analysis in this paper is directed, there is a hierarchy of occupational qualifications, and the analysis is oriented toward facilitating movement through that hierarchy, or adding new qualification levels to that hierarchy. In nursing, the major issues pertain to adjusting educational structures to a single professional qualification level.

Finally, I have been asked to comment on the concept of looking upon the first attempt to implement the ideas suggested in this paper as an 'experiment'. In effect some of the approaches to involving the CAATs in more advanced level training offered here, though they parallel practices in other jurisdictions, would be

quite novel, some even deserving of the epithet, revolutionary, for Ontario. There is no assurance that they will work here exactly as they do in other jurisdictions or in the minds of their proponents, or that the initial design adopted for them here would be the best one.

In such a context of social policy reform, Donald Campbell, in a brilliant essay entitled, "Reforms as Social Experiments", has urged that reforms be treated as experiments. That way, those who are charged with implementing them need not feel that it is their competence that is being judged in evaluating the reform, and hence feel that they have to defend the initiative whatever its outcomes, or guard information about outcomes. If, instead, the initiative is looked upon as an experiment, then (i) shortcomings of the initial implementation might be seen as inhering in the design itself, and not be the "fault" of those who implement it; (ii) there would be a more supportive climate for collecting, sharing, and publicizing to all relevant parties good information about the initiative and its outcomes than where parties involved in implementation fear that such information could be seen to reflect adversely on themselves; and (iii) it is more likely that policymakers can learn from their experience and use that learning to improve upon things in subsequent iterations than where a reform is presented as "sure to be successful if only those responsible for implementing it don't screw it up".

Insofar as the approaches offered here constitute departures from previous educational policy in Ontario, it is appropriate to conclude this paper with a quotation that begins one of the chapters of Matterson's book on the U.K. polytechnic institute (p. 67, attributed to one F. M. Cornford) and which appears at the beginning of this essay:

> Every public action which is not customary either is wrong or, if it is right, is a dangerous precedent. It follows that nothing should ever be done for the first time.

What this essay has been about is doing something for the first time to respond to a need for more advanced training in Ontario!

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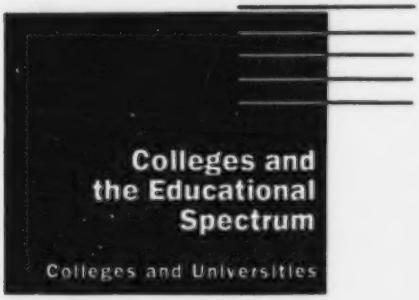

Background Papers

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Skilled and Educated: A Solution to Ontario's Urgent Need for More Polytechnic Programs

Study Team 5

Skilled and Educated:
A Solution to Ontario's Urgent Need for More Polytechnic Programs

Summary

Ryerson-type education could be offered more broadly in Ontario by combining the job-ready career-oriented education of the community college with the liberal studies and general courses of the university system. The term "polytechnic" is applied to this type of combination in Ontario, even though the term has other meanings elsewhere.

While a market study would be the best way to assess the need for expansion of polytechnic programs, there are already several indications that such a need exists, particularly if the combined program results in a recognized baccalaureate degree. These indications are as follows:

1. Ryerson's programs are oversubscribed, and the graduates quickly find employment.
2. Many university graduates go on to take community college courses, and vice versa.
3. Employers report the need for better communications skills among their trained personnel.
4. Retraining and continuing education, important in the modern workplace, depend upon language facility.
5. Combined programs will bring to the university people from less socio-economically advantaged families.
6. The baccalaureate degree for graduates of combined programs will help improve societal respect for practical, as opposed to theoretical, abilities.
7. Combined courses of a polytechnic nature could serve students who presently drop out of existing programs.

Partly because professional organizations insist upon university-level degrees, and partly because the Ontario Government left Ryerson as the only polytechnic and did not legislate equal recognition for a polytechnic degree, there is now no apparent room for a degree which is less academic, even if more practical, than the one given at university. Non-university bachelor's degrees, however desirable they might be, are likely in Ontario today to lead to "dead ends" in employment situations. This consideration is of the utmost importance in choosing between the options that are available for expanding polytechnic programs in Ontario.

For the purposes of this report, it is assumed that Ontario will not build a series of new Ryersons. It is also noted that Ryerson itself is on the threshold of full university status. The options for expanding polytechnic programs are as follows:

1. Some community colleges could become polytechnics or at least offer a bachelor's degree by expanding some of their more advanced programs. The main difficulty would be the perceived "second class" nature of the degree. There would also be additional expenses required and there might be problems in continuing to service the apprenticeship trades.
2. Universities could introduce programs in areas now covered by Community Colleges. This happens now, but seems to carry the burden of extra expenses, as well as possible dilution of the university program.
3. Degree-completion programs could be encouraged, whereby community college graduates receive considerable credit toward a regular bachelor's degree in the university system. The difficulties are that the universities offer serious resistance to giving sufficient credit, and there is a problem in the sequential nature of this type of education.

4. The best option appears to be for integrated polytechnic programs of study, planned from the very beginning, and using the resources of both community colleges and universities with courses each year at both types of institution. This is best done on a local basis rather than province-wide. There are two ways to implement such programs:

   i) Joint Venture – a third entity could be created in each locality, namely a polytechnic with its own Board and its own degree-granting authority, but with all education inputs coming from the local community college and local university. The two main drawbacks are:

      a) The problems of a polytechnic that is really a "phantom" without its own physical existence and its own dedicated faculty; and

      b) The aforementioned problems with a non-university bachelor's degree.

   ii) Conjoint courses with university degree – this is the preferred option, calling for integrated polytechnic courses with an administrative group responsible for the creation and delivery of the individual degree programs. Students would enroll at either the university or the community college in a specified conjoint program leading to a university degree. The joint programs would be carefully prepared and would consist of courses at both institutions. To bring this about and overcome inertia and institutional rigidity, a Secretariat should be established by the Ministry of Colleges and Universities to create and oversee conjoint polytechnic programs in various localities. The Secretariat would provide expertise and assistance on the local level and would be responsible for local and province-wide promotion of the new polytechnic programs. As an incentive to create these programs, the basic income unit for a polytechnic student should be enhanced by a small amount. As a last resort, there could be the threat of budget cuts, restorable upon successful creation of appropriate polytechnic programs.

For these local conjoint programs to be successful, the Ontario Government would have to give a strong indication of commitment.

There is a real need for increased polytechnic education and there is a feasible method to achieve it using existing resources in a more flexible and cooperative way. This opportunity should be realized without delay.

Qualification et Instruction:
Réponses au besoin urgent de répandre l'enseignement polytechnique en Ontario

Sommaire

Il serait possible de reproduire en Ontario le modèle éducatif de Ryerson en combinant, d'une part, l'enseignement offert par les collèges communautaires, axé sur les carrières et offrant des débouchés immédiats et, d'autre part, l'enseignement général offert par les universités. Cette formule est qualifiée en Ontario d'enseignement « polytechnique », quoique ce terme puisse avoir d'autres acceptions.

Une étude de marché serait la meilleure façon de mesurer la nécessité de multiplier les programmes d'enseignement polytechnique, mais plusieurs indices la confirment déjà, en particulier si la formation polyvalente aboutit à un baccalauréat reconnu. Ces indices sont les suivants :

1. Les demandes d'inscription aux cours de Ryerson dépassent le nombre de places offertes et les diplômés trouvent rapidement un emploi.
2. Les diplômés des universités sont nombreux à suivre des cours dans les collèges communautaires et vice-versa.
3. Les employeurs soulignent que les aptitudes de communication du personnel qualifié laissent à désirer.
4. Le recyclage et la formation continue, si importants dans le monde du travail, exigent une bonne maîtrise de la langue écrite et parlée.
5. La formation polyvalente attirera vers l'université des personnes issues de familles moins avantagées sur le plan socio-économique.
6. Le baccalauréat offert aux diplômés des programmes polyvalents rehaussera la valeur sociale des aptitudes pratiques par rapport aux aptitudes théoriques.
7. Les cours combinés de type polytechnique pourraient accueillir les étudiants qui abandonnent les programmes existants.

Il ne semble pas y avoir de place pour un diplôme non universitaire qui mette l'accent moins sur les matières scolaires et davantage sur l'enseignement pratique et cela pour deux raisons : d'une part, parce que les organisations professionnelles insistent sur la présentation de diplômes universitaires et, d'autre part, parce que le gouvernement de l'Ontario n'a pas créé d'autre établissement d'enseignement polytechnique que Ryerson et n'a pas adopté de loi reconnaissant la valeur d'un diplôme polytechnique. En Ontario, la situation est telle que les détenteurs d'un baccalauréat ne trouvent guère de possibilités d'avancement professionnel si leur diplôme, aussi attrayant qu'il puisse être, leur a été décerné par un établissement autre qu'une université. Il est primordial de tenir compte de cet état de fait au moment de choisir parmi les différentes solutions envisageables pour l'expansion des programmes polytechniques de la province.

L'hypothèse retenue aux fins du présent rapport est que l'on n'assistera pas en Ontario à la création d'une série d'établissements semblables à Ryerson. Il convient de noter que Ryerson est sur le point d'être reconnu comme équivalent d'une université à part entière. Les solutions envisageables pour l'expansion des programmes polytechniques sont les suivantes :

1. Certains collèges communautaires pourraient se transformer en établissements polytechniques ou tout au moins offrir un baccalauréat en enrichissant leurs programmes les plus poussés. La difficulté réside dans le fait que le diplôme pourrait être perçu comme un « diplôme au rabais». Par ailleurs, cette solution serait assortie de frais additionnels et pourrait avoir des répercussions négatives sur l'enseignement des professions techniques.

2. Les universités pourraient introduire des programmes dans des domaines généralement réservés aux collèges communautaires. Cela se fait déjà, mais encore une fois au prix de frais additionnels et au risque de nuire au programme universitaire.

3. On pourrait encourager la création de programmes sanctionnés d'un diplôme, en vertu desquels des étudiants diplômés des collèges communautaires recevraient des crédits notables en faveur d'un baccalauréat ordinaire décerné par une université. Le problème ici réside dans la nature séquentielle de ce type d'éducation et dans l'âpre résistance des universités à l'idée d'octroyer les crédits espérés.

4. La meilleure solution semblerait être la création de programmes d'études polytechniques intégrés, planifiés du début à la fin, faisant appel aux ressources aussi bien des collèges communautaires que des universités et offrant chaque année des cours dans les deux types d'établissements. Ceci se ferait de préférence à l'échelon local plutôt que provincial. Il y aurait deux façons de mettre en oeuvre ce type de programme :

   i) L'entreprise conjointe : il serait possible de créer une troisième entité dans chaque localité, à savoir un établissement polytechnique doté de son propre conseil d'administration, investi du pouvoir de décerner des diplômes, mais dont tous les cours seraient conçus et dispensés par le personnel de l'université et du collège communautaire locaux. Les deux inconvénients majeurs de cette solution sont : a) les problèmes inhérents à une faculté polytechnique « fantôme » ne possédant pas ses propes locaux ni son propre corps enseignant et b) le discrédit attaché aux baccalauréats non universitaires comme mentionné ci-dessus.

   ii) Les cours conjoints menant à un diplôme universitaire : c'est la solution préférable, en ce sens qu'elle offre des cours polytechniques intégrés dont elle confie l'administration à une équipe également responsable de la création et de l'enseignement des différents cours du programme. Les étudiants pourraient s'inscrire soit à l'université, soit au collège communautaire, à un programme conjoint menant à un diplôme universitaire. Ces programmes conjoints seraient préparés avec soin et comporteraient des cours offerts par les deux types d'établissements. Pour vaincre l'inertie et la rigidité des établissements et parvenir à cette fin, le ministère des Collèges et Universités mettrait sur pied un Secrétariat chargé de créer et de superviser des programmes polytechniques dans différentes localités. Le Secrétariat mettrait à contribution ses ressources et son expertise à l'échelon local et se chargerait de promouvoir les nouveaux programmes polytechniques dans les localités et à travers la province. Afin d'encourager la création de ce type de programmes, on pourrait envisager d'augmenter légèrement le revenu de base des établissements par étudiant inscrit à un programme polytechnique; en dernier lieu, il serait possible d'avoir recours à des menaces de coupures budgétaires, avec rétablissement du financement antérieur après mise en oeuvre d'un programme polytechnique approprié.

Pour garantir le succès de ces programmes conjoints, le gouvernement de l'Ontario devrait clairement indiquer son engagement en leur faveur.

Répandre l'enseignement polytechnique constitue un besoin réel et le moyen d'y parvenir est d'utiliser les ressources existantes de manière plus souple et plus coopérative. Il faut agir dans ce sens sans plus tarder.

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Background

The Province of Ontario has had for the past three decades a dual system of post-secondary education, consisting of universities on the one hand and community colleges on the other. There have been repeated calls for a third option which would combine the job-ready, career-oriented education of the Community College with the liberal studies and general education of the University system.

Ontario has had an institution devoted to this type of combination; namely, Ryerson Polytechnic Institute. Possibly as a result of this, people in Ontario have come to refer to the combined type of education as "polytechnic." Unfortunately, the term "polytechnic" is used in many different ways in various countries and provinces, seldom with the meaning it has acquired in Ontario. Despite this, rather than invent a new term, this report will use the word "polytechnic" to refer to the above-mentioned combination. It will be more precisely defined below.

Ryerson has been a very successful institution and there have been many calls for the creation of similar institutions throughout Ontario. Given funding restraints, such calls have found little support in Ontario's post-secondary education community. If fact, for reasons to be examined in this report, Ryerson itself has found its unique status untenable and is moving to become a university.

Considerable interest still exists, however, in the possible provision of polytechnic education by means of somehow combining the services of colleges and universities. A topic within the Vision 2000 project, it is the basis for this report, wherein the concept of "combined" polytechnic education will be elaborated, the need for it assessed, and the possible means of provision examined.

Definition of Polytechnic

There are many types of post-secondary study which combine career training with general education. Universities offer career-oriented education in medicine, law, engineering, business, accounting, etc., and these include some general subjects along the way. Since, for better or for worse, these have come to be accepted as "traditional" areas for universities, they are in this report excluded from the "polytechnic" concept. It is assumed that these are in universities because there is a large research or theoretical component in these fields, over and above the elements of career skills and general education. This report will define "polytechnic," therefore, as that form of education which:

a) Is not traditionally regarded as the province of the University;

b) Produces a graduate who is "job-ready" virtually immediately upon course completion;

c) Includes significant elements of general education to enhance:

   1) Communication skills, and

   2) An understanding of the global and social context, both general and particular, in which the job skills are to be exercised;

d) Provides a recognized first-level baccalaureate degree.

Ontario already has programs that fall within this definition, and not only at Ryerson. Several universities have self-contained courses in areas related to education, health care, agriculture, and business, giving bachelor's degrees in areas where many community colleges offer diplomas.

The key question for this report is whether there needs to be a major expansion of such courses, covering many of the employment fields now served by community colleges, but adding a larger component of general

education, and carrying a bachelor's degree. If such an expansion is thought to be desirable, how best could it be arranged, given constraints on capital spending?

The Need for Expanded Polytechnic Education

The best and most direct way to assess the need for expansion is to interview a large number of employers across Ontario, asking whether they perceive the need for graduates with a combination of specific skills and contextual studies. Based on the results, some sample courses might be designed and discussed with a cross-section of grade 11 students to determine their interest. Such a market study is needed but is beyond the scope of this report.

Even so, there are clear indications that a need exists, and there are important general arguments to be made for polytechnic expansion. First and foremost, there is the experience of Ryerson itself. That there is a demand is shown by the fact that most Ryerson courses are oversubscribed, and many of the students come from far outside Toronto. As a general rule, Ryerson graduates quickly find employment in their chosen fields.

Another indicator is the large number of students who attend both types of traditional institution sequentially. Increasing numbers of community college graduates are seeking admission to university for further education, and, similarly, growing numbers of university graduates are enrolling at community colleges for career-oriented studies.

Reports from the workplace repeatedly stress the degree to which modern jobs are oriented around human communication, not only in the service sector, but even in advanced technology manufacturing industries. Communication skills tend to separate the excellent from the mediocre in all career categories, no matter how technical. Retraining and continuing education will be part of every adult's working life, but these, in turn, depend upon language facility. While the study of a few liberal arts courses at a university will not guarantee communication and language skills, businesses do report an apparent general correlation between such skills and time spent at a University.

There are several other arguments to be made in favour of expanding polytechnic education. Consider the issue of equality of opportunity. Despite all efforts to make higher education accessible, most of the people who attend university are still coming from the higher socio-economic sectors in Canadian society. Community Colleges draw more from the middle classes. The experience of Ryerson is said to be somewhere in between the two. It is widely believed that the reason people from less affluent families do not orient themselves to university education has little to do with the cost of such education, but a great deal to do with the interest in moving quickly and in a direct line to a fairly certain job. An expansion of polytechnic education, using existing university teachers, would probably attract a higher proportion of students from less socio-economically advantaged families.

Equally important, there is a school of thought that expresses concern about attitudes that may affect Canada's capacity to succeed in the increasingly competitive global economy. Countries such as Germany and Japan have a tradition in which people with practical abilities are respected and admired. In contrast, our society seems to denigrate the practical and to value more highly the scholarly, research-oriented, and theoretical. The more that practical career skills can be accompanied by a bachelor's degree and by a liberal arts education, the more respect is likely to accrue to such skills.

Finally there is the matter of people who attend community college or university and then drop out. Such individuals might be much happier in a combination course with the best elements of both. Those who complete their studies at a college or university and then enter a course of study at the other type of institution would often be better served by a single, well planned course of study.

In summary, while a proper market study is the only way to analyze the demand for what we are calling "polytechnic" education, there are excellent reasons for proceeding in this direction. There is a real need, and the demand should be there, provided the courses are designed with a view to local manpower requirements.

Options for Polytechnic Expansion

For the purpose of this paper, it will be assumed that building an additional three or four polytechnic institutions on the Ryerson model is simply an unavailable option. Before considering the remaining options, it is important to examine the Ryerson experience.

In almost every respect, Ryerson has been an exemplary institution and a resounding educational success. The graduates have received a combination of career skills and general education and have been able to work successfully in their chosen fields. Because Ryerson remained alone with its education mixture, and because neither government nor the private sector enacted policies to recognize and foster Ryerson's unique place, succeeding administrations at Ryerson have had to ensure that both the admission standards and the academic standards were identical to those of Ontario universities. This has been necessary so that graduates would be entitled to professional standing according to various accrediting bodies. Less vital, but still important, has been the need to ensure that faculty members were also given the recognition they deserved among their peers. This process has led to Ryerson becoming a member of the community of universities and arriving at the threshold of "full" university status.

Professional organizations (for example, engineers, accountants, nurses, etc.) have been permitted to demand a university degree as a sine qua non for entry into the profession. When, in the early days of Ryerson, entry to its degree program was somewhat easier than was entry to university, the Ryerson degree was undervalued by the professions and by business organizations. This would probably not have happened had there been large numbers of graduates with that type of degree. There would have been pressure for them to be accepted on the basis of performance and they would have earned respect in the workplace. With the numbers as small as they were, however, they were an easy target for "credentialism"-type discrimination. Ryerson took steps very early, therefore, to make sure that its degree had the same academic rigor as those of the universities.

It is the opinion of the writer of this report that, in the vast majority of workplaces for which a Baccalaureate Degree is a condition of entry, there is no valid reason to discriminate in favour of those degrees that are entirely and rigorously academic and against those degrees that represent a combination of proven specific competence and reasonable academic achievement. By according prestige only to the academic and by blocking entry to those with combined but less academic qualifications, we perpetuate a technologically incompetent workforce at a time when the very opposite is needed.

Despite the writer's wishes, however, it is essential to be realistic in choosing among polytechnic options. Is there room in Ontario's society for a Bachelor's degree, the program for which can be entered somewhat more easily, and the academic demands for which are slightly lower than most university degrees? As of today, such room does not exist, and the Ryerson experience suggests that, unless huge numbers of such graduates appear on the scene at one time, such room will not be made.

Having stated this preamble, let us now examine the possible ways in which polytechnic expansion could occur.

1. Community College Degrees

There are now a number of three-year programs at Community Colleges. It might well be possible to permit these colleges to add additional courses in communications and liberal arts, to increase the course of

study to four years, and to award successful applicants a Bachelor's Degree. Accreditation would be carried out by a central provincial authority.

To make this degree a respectable one, colleges would have to bolster their capacity to teach the liberal arts. The recruitment of appropriate faculty for these purposes might not be easy to accomplish and, in any event, would be somewhat expensive. Presumably some internal problems might arise from having within the same community college a full range of programs from the apprenticeship trades through to a Bachelor's Degree.

It has been suggested that a few colleges could shift entirely to the polytechnic mode. This would lead to an additional expense since a whole new structure would be needed for the trades and for less intensive programs.

These are not insurmountable difficulties, especially since the colleges already have considerable expertise in some liberal arts studies. The problem of the degrees being regarded as distinctly "second-class" is a serious one, however. If it happened at Ryerson, it is even more likely to occur with community colleges.

2. University Polytechnic Courses

As noted earlier, some universities already offer programs in fields where community colleges are also active. Presumably, all universities are free to develop new, baccalaureate-level courses in areas that are traditionally taught at Community College. There may be some trend in this direction, and the question is whether this should be further encouraged.

Since universities are hardly likely to begin new programs except where there is an assured demand, there is really nothing wrong with this idea. As a general rule, however, the universities would have to recruit new faculty and create new facilities for a major expansion into areas of this kind. Given financial constraints, this could dilute their traditional programs.

3. Degree-Completion Programs

Some university-level institutions, including Ryerson, now accept three-year diploma graduates from certain community colleges and give them a reasonable amount of credit for the courses they have taken. By giving substantial credit, they make accessible a degree-completion program at their university. Such programs are the subject of negotiation between the institutions involved and are not always easy to arrange. They are a great improvement, however, over the usual situation in Ontario, whereby Community College graduates are given very little credit for their courses when they decide on further study towards a Bachelor's Degree. Degree-completion arrangements are, for the most part, fairly recent and tend to be restricted to particular courses of study, but there is good evidence that the trend is gaining momentum. Among several notable arrangements have been those between Lakehead University and Confederation College, Ryerson Polytechnic and Durham College, and the University of Guelph and Conestoga College.

Degree-completion programs would certainly open a channel for Community College graduates who recognize the need for a more general education before entering the job market, or for those to whom academic interests have come somewhat later in life. Still, such programs are sequential, not organic. A Community College graduate, with fresh skills , must stay away from the practice of his or her chosen area for a couple of years while studying general subjects. This is a formula which can easily lead to the loss of such skills, and to the loss of interest in practising them. Most degree-completion programs, therefore, demand some work experience, partly to try to solve that problem. This is helpful, but the fact remains that sequential courses of study will always suffer from that serious drawback.

4. Conjoint Polytechnic Programs

This option would call for integrated polytechnic programs of study using, from the very beginning and in a planned way, the resources of both community colleges and universities. In each year there would be courses taken at both types of institutions, thereby mixing the career-oriented courses with the communications and liberal arts courses at every stage. Work experience could also be part of such polytechnic programs in the well-known "co-op" mode.

Such integrated programs do not now exist although there was one which came very close to being established some years ago, involving McMaster University and Mohawk College in a joint degree course in journalism. At the last minute, it was turned down by central authorities, despite having been accepted (with difficulty) by both institutions.

There is much to commend this approach to polytechnic education. Since the program is planned from the very beginning, it has an organic, integrated quality, and is not sequential or piecemeal. It is especially likely to attract the kinds of people who would choose to go to Ryerson if they lived nearby. In effect, it would bring Ryerson-type education to all those communities in Ontario that had both universities and community colleges in close proximity.

Since the courses would use existing physical and human resources, the additional cost would be small. There are two subtypes of this option which should be considered in some detail, but we should first deal with a related proposal that falls under the same heading. This related proposal (Polytechnic "without walls") suggests that the integrated courses could be planned on a province-wide basis and the individual components of it taken at any of several institutions in Ontario, or even via correspondence or television. This "Ontario Polytechnic" approach is attractive at first glance, offering maximum flexibility, particularly to adults who may be able to take bits and pieces here and there as life obliges them to move from place to place. While there should certainly be ways in which people who move can still complete a polytechnic education, it would seem unwise to structure the expansion of polytechnic education on such a diffuse basis. If there is anything that has been learned about successful polytechnic education, it is that it must meet local needs. The programs of study must not only be chosen with the help of local employers, but must be presented with their active involvement. Local government, trade unions, Chambers of Commerce, and so on, should get behind the institutions offering polytechnic education on the local scene and should be supportive of their efforts in every way. The two options to be considered at length, therefore, both have a strictly local character.

4(a). Local Joint Venture

The essence of this idea is to create a third entity on the local scene; namely, a polytechnic, but to have it exist largely as an administrative structure with its own Board and its own degree-granting authority but obtaining its educational inputs entirely from the local community college and local university.

For example, a Hamilton Polytechnic could be brought into existence and given an administrative core and a small central building. Its students would enroll for particular courses of study, such as a degree in Child Care or in Transportation Engineering Technology. The degree would be a Bachelor of Applied Arts and Technology (or Applied Science and Technology).

The program of education for child care, for instance, would consist of all the courses now offered in the three-year diploma program at Mohawk, with the exception of the Psychology, Language Studies, Sociology, and so on. This would reduce the Mohawk component to approximately 50% of the degree course, and it would be intermixed with courses at McMaster in English, Psychology, Sociology, and several other courses to be chosen by the student. Admission to the program could be on the same basis as currently required by McMaster or could be on the basis now demanded by Mohawk, but with an additional entrance exam.

Funding for Hamilton Polytechnic would be in the form of Basic Income Units from the Province of Ontario, but such funds would be spent largely in purchasing "places" for its students in McMaster and Mohawk. The financial consequences should not be too serious. It is probable that most of the students who would opt for such polytechnic programs would be people who would otherwise take the three-year program at Mohawk. Since Mohawk would be the site of 50% of the four-year program, Mohawk might be thereby "losing" the payments for one-third of the education of these students. On the other hand, the program would also attract students who are insistent upon a degree and who now bypass Mohawk and go straight to McMaster. These are new students who would not otherwise have been available to Mohawk and who, therefore, make up for any "loss" that might have been suffered. It is even possible that the polytechnic program would attract new students who would have attended neither institution, or who would have attended one or the other and then dropped out because of dissatisfaction.

There could be logistics problems, of course. As it happens, Mohawk and McMaster are close enough that a shuttle service would make it reasonably possible for timetable issues to be dealt with. It would not be easy, however, to schedule courses at the separate institutions to take place in consecutive hours. A more serious drawback is the essentially administrative or "phantom" nature of "Hamilton Polytechnic." With what and with whom are students to identify? Their institution is one in which they need never set foot since it has no classroom, no gymnasium, no cafeteria — no real physical existence, yet it is the institution which grants the degree.

This lack of physical existence is further compounded by a lack of faculty members whose primary allegiance would be to the institution. There would need to be faculty members with whom the students would personally relate. These faculty members would have the responsibility to assess the course of study, make improvements, respond to students' needs, and so on. With all the faculty being at McMaster and Mohawk, however, these students would find themselves in a situation where the people assigned to take care of them were never the ones teaching them. This is not an insurmountable difficulty, but it is a serious one.

A more important problem with the joint-venture model is the matter dealt with in the introduction to the section on options; namely, the difficulties encountered in trying to get a new, non-university Bachelor's Degree accepted by the professions and employers of Ontario. The Ryerson degree encountered problems; would a degree from "Hamilton Polytechnic" receive a better reception? Without large numbers and without determination on the part of public and private authorities to force equal acceptance, such recognition is not going to occur.

4(b). Conjoint Courses with University Degree

This option is for local conjoint arrangements, integrated polytechnic courses, and an administrative group responsible for the creation and delivery of the individual degree programs. The main difference from 4(a) above would be that, instead of the students enrolling at a "Hamilton Polytechnic," he/she would enroll at either McMaster or Mohawk in the "Mohawk-McMaster Program" in any one of a number of polytechnic areas. The resulting degree would be as for Option 4(a), but would be granted by the University, thereby avoiding the issue of "second-class" degrees. A group of faculty members and administrators from both universities would form the committee to plan, administer, and supervise the joint programs and to report on these to the administration of both institutions.

The advantages of this model are clear. Not only would such well planned joint programs fill the important polytechnic niche, but graduates will gain an easier acceptance, given the university origin of their degree. No new institution needs to be created, phantom or otherwise, and additional expenditures should be minimal. The local character of the educational program is retained, and the offerings can, therefore, be tailored to the real needs of the community.

The disadvantages are not so much in the model as in the difficulties of bringing it into existence. The problems are inertia and institutional rigidity. Many universities have no inclination to engage in genuine

partnerships with community colleges, and they will resist such change. There is no incentive for them to move in that direction.

Furthermore, joint programs are not easy to design and there is a certain expertise that may be lacking in this regard. There is also no existing facility for promoting and marketing joint programs on a large scale. If the demand is not stimulated, the programs could prove impractical.

Recommendations

There is a need for expansion of polytechnic education opportunities. While a proper market study would certainly be justified, there should be an immediate start to planning the widespread adoption of polytechnic courses across Ontario, utilizing the resources of both the universities and community colleges. Given that there seems little political or industrial will to establish firmly an "intermediate" Bachelor's Degree in Ontario, the only degree that will be useful to polytechnic graduates is that given by a university. For that reason, the preferred option is number 4(b) above; namely, conjoint polytechnic programs arranged at the local level as a joint endeavour between a university and its neighbouring community college.

To overcome the disadvantages inherent in this kind of partnership activity, there will have to be both help and incentives for these programs to come into being.

The help required would be in the nature of:

1) a source of expertise; and
2) a centralized marketing thrust.

To this end, a secretariat should be established by the Ministry of Colleges and Universities to create and oversee conjoint polytechnic programs in various localities. As to expertise, the Secretariat should provide people in each locality in order to organize local advisory boards and assist in the creation of appropriate programs. Issues of timetabling, learning resources, cooperative arrangements, etc., could be dealt with, utilizing the knowledge and experience of these people.

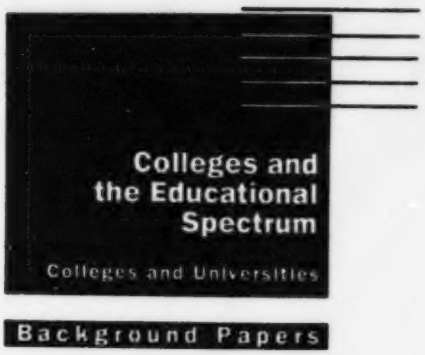
The marketing side of the Secretariat would consist of a separate group whose main activity would be the promotion of the new polytechnic programs. Targets for this promotion would be the institutions themselves, the potential employers of the polytechnic graduates, and the public at large, including potential students, of course. A heavy advertising and promotions budget would be required in the first few years.

As to incentives, these can be of a positive or negative type. Negative incentives are undesirable, but might be required in the event that certain institutions are uncooperative. While something as drastic as a budget cut, restorable upon successful creation of appropriate polytechnic programs, would be a last resort, the government should adopt it if all else fails.

Much better would be a positive incentive, whereby the basic income unit for a polytechnic student could be enhanced by a small amount. This would serve not only to encourage greater acceptance, but might also make up for the additional administrative burden which such students, with their complex programs, might bring.

More than anything else, there would have to be a strong indication that the government believed in this new educational track, and that it was prepared to give it a high degree of commitment and visibility.

Ontario needs people who are both skilled and educated if we are to maintain our living standards in the future. This can be achieved using existing resources in a more flexible and cooperative way. The time for talk has passed; action is clearly possible — it should be taken without further delay.



Craig McFadyen

Consultations on College-University Linkages

Study Team 5

Summary

As part of Study Team 5's examination of issues relating to college-university relations, consultations were undertaken with five representative bodies, namely: the Metro-Toronto Academic Heads Sub-Committee of the Association of Colleges of Applied Arts and Technology in Ontario (ACAATO), the Executive of the Ontario Confederation of University Faculty Associations (OCUFA), the ACAATO Committee of Presidents (COP) Task Force on College and University Relations, the Council of Ontario Universities (COU) Committee on University-College Relationships, and the Ontario Council of University Affairs (OCUA) Committee on University-College Linkages. This report summarizes these discussions.

All parties to these consultations agreed that the 'dead-ending' of college graduates is a problem that needs to be addressed. However, all groups also noted that the magnitude of this problem and the potential demand for college to university transfer is currently indeterminate. A more precise measurement of need was recommended. Clarification of the concept of 'polytechnic' education was also thought to be required.

In addition, there was a commonality of opinion amongst these representatives of the university and college sectors that the extension of transfer arrangements should not be permitted to have a steering effect on the fundamental mission and mandate of the colleges.

The relatively poor record of articulation agreements between colleges and universities was thought not to reflect an unbridgeable gap between the two sets of institutions. Noting that transfer between and within universities as well as between and within colleges was also a problem, all groups felt that both sectors needed to develop more systematic procedures for dealing with transfer students. Furthermore it was noted that the Ministry of Colleges and Universities (MCU) has only stressed the importance of improving transferability in the last two years, and since that time there has been a significant increase in the number of bilateral agreements and the overall activity in this area.

On the whole, the representatives of the college sector tended to be more willing to accept or experiment with alternative enabling models for degree completion (in addition to existing bilateral arrangements) and 'polytechnic' studies than were representatives from the university sector. Participants from the college sector could see the merits of creating a provincial coordinating body, selectively extending degree status to some college programs, and creating a 'university of technology' (*possibly* by designating a college or colleges as such). The concept of a Provincial Institute on Academic Awards for Combined College-University Studies was particularly well received by the representatives of the college sector as an alternative enabling model. The representatives of the university sector thought that every effort should be made to work within the existing bilateral model. COU and OCUFA thought that it would be useful to create a body to coordinate and disseminate information on existing transfer arrangements, and to coordinate and facilitate (including the provision of funding for new courses and programs) the extension of further arrangements. There was some difference of opinion on the nature of such a permanent committee on college-university coordination. Although all agreed that it should have representatives from both sectors, some felt that it should be a purely voluntary joint sub-committee of COU and COP, but others felt that a reporting relationship to the Minister might enable it to obtain special funding. In either case, it was thought important for this body to produce an annual public report on the state of transfer arrangements between colleges and universities.

Sommaire

L'équipe d'étude 5 a mené, dans le cadre de son examen des questions liées aux relations collégiales-universitaires, des consultations auprès de cinq groupes intermédiaires : le sous-comité des chefs de département de la communauté urbaine de Toronto de l'Association des collèges d'arts appliqués et de technologie de l'Ontario (ACAATO), le conseil de direction de l'Union des associations des professeurs des universités de l'Ontario (UAPUO), le groupe de travail sur les relations collégiales-universitaires du comité des présidents de l'ACAATO, le comité des relations universitaires-collégiales du Conseil des universités de l'Ontario (CUO) et le comité des liens universitaires-collégiaux du Conseil ontarien des affaires universitaires (COAU). Le présent rapport résume les grandes lignes de ces discussions.

Toutes les parties ont convenu qu'il fallait se pencher sur le problème que représente l'impasse dans laquelle se trouvent les diplômés des collèges. Cependant, comme elles l'ont constaté, on n'a pour l'instant qu'une vague idée de l'ampleur du problème et de la demande possible du transfert des collèges vers les universités. Il a été recommandé d'obtenir une mesure plus exacte de la demande. Il a également été jugé opportun de clarifier le concept d'études polytechniques.

De plus, les représentants du secteur universitaire comme du secteur collégial étaient d'avis qu'il faut éviter que l'élargissement des ententes de transfert n'altère la mission et le mandat fondamentaux des collèges.

On ne pensait pas que le dossier relativement peu reluisant des ententes d'articulation entre les collèges et les universités soit un obstacle infranchissable vers un rapprochement entre les deux types d'établissements. Constatant que les transferts inter-universitaires et intra-universitaires comme les transferts inter-collégiaux et intra-collégiaux constituaient également un problème, tous les groupes reconnaissaient que les deux secteurs devaient mettre au point des procédures plus systématiques pour faire face aux transferts d'étudiants. Qui plus est, a-t-on observé, ce n'est que depuis deux ans que le ministre des Collèges et Universités (MCU) met l'accent sur l'importance d'améliorer la transférabilité, et depuis, le nombre d'accords bilatéraux s'est fortement accru, tout comme l'activité globale dans ce domaine.

Dans l'ensemble, les représentants du secteur collégial étaient plus disposés que leurs homologues du secteur universitaire à accepter ou expérimenter des modèles préparatoires alternatifs à l'obtention de diplômes (en plus des accords bilatéraux existants) et les études polytechniques. Les participants du secteur collégial reconnaissaient l'utilité de créer un organe de coordination provincial, de modifier de façon sélective le statut de certains programmes collégiaux et de créer une université de technologie (possiblement en désignant un ou des collèges comme tels). Le concept d'un institut provincial de prix d'études collégiales-universitaires combinées, en tant que modèle préparatoire alternatif, a été particulièrement bien reçu par les représentants du secteur collégial. D'après les représentants du secteur universitaire, il faut à tout prix travailler à l'intérieur du modèle bilatéral existant. Selon le CUO et l'UAPUO, il serait utile de créer une entité chargée de coordonner et de diffuser l'information sur les ententes de transfert existantes et de coordonner et faciliter (y compris attribuer des fonds pour la création de nouveaux cours et programmes) l'élargissement d'ententes futures. Les opinions divergeaient quelque peu quant à la nature d'un tel comité permanent de coordination des relations collégiales-universitaires. Même si tous convenaient que des représentants des deux secteurs devaient y siéger, certains croyaient qu'il devrait plutôt s'agir d'un simple sous-comité mixte à participation volontaire du CUO et du comité des présidents, alors que d'autres pensaient que son imputabilité directe au ministre lui permettrait d'obtenir des fonds spéciaux. Dans un cas comme dans l'autre, on jugeait important que cette structure publie annuellement un rapport sur la situation des ententes de transfert entre les collèges et les universités.

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Introduction

In order to ensure that the discussions in these meetings were frank and open the participants were assured that comments would not be attributed to individuals. The views expressed by participants do not necessarily reflect the positions of the organizations that they represent. In fact, most of the organizations consulted were in the process of developing or revising their positions on linkages between the colleges and universities, and those consulted did not have official policy positions to present to us on behalf of their organizations. The intention of these consultations was to stimulate dialogue in this area and to provide the Study Team with further perspectives to consider in the process of drafting recommendations for its final report.

Meeting with ACAATO Metro Academic Heads

Participants

Anne Bender, Humber College

Peter Brown, Sheridan College

Ray Devlin, Centennial College

Garth Jackson, George Brown College

Stephen Quinlan, Seneca College

Facilitator

Michael Skolnik

Council of Regents Staff

Brian Wolfe, Vision 2000 , Study Team 5

Rapporteur

Craig McFadyen

Identification by Participants of Issues and Problems Relating to College-University Relationships

All participants agreed that there is a need for increasing the number of transfer arrangements between colleges and universities, and that there are many inconsistencies across and within universities with respect to current arrangements. It was argued that the need for extending linkages and transfer arrangements has been expressed in a number of ways and that this should not even be in question.

One example provided was the case of a CAAT that hired a university professor to teach a course at the CAAT for which students were willing to pay additional fees and take the course above and beyond their regular course load.

Transfer arrangements were deemed important for a number of reasons. It was suggested that individuals' career paths should not necessarily be determined by choices made in high school, often with less than full information and invariably with little experience on which to base those decisions. It was thought that people should have the opportunity to explore their talents in more applied fields without

fear of unwarranted barriers to transfer if they chose to do so at some later date. In addition, it was noted that tuition fees for students were lower in community colleges than in universities and, if more extensive transfer arrangements were available, these lower costs would make university more accessible. Moreover, geographical accessibility would be enhanced in the process.

It was suggested that effective transfer arrangements were just as important in the area of general arts and science (GAS) as they are in programs in specific occupational fields, and that the distinction between these two areas was not as clear-cut as suggested in one of the Study Team's background papers.[1] In fact, it was noted that it is often easier to negotiate articulation agreements for GAS programs with the universities than it is for quasi-professional programs.

The lack of consistency in the granting of transfer credit for college graduates across and within universities, and the varying entrance requirements from university to university was noted as a major problem with existing arrangements. This presents problems for counsellors who are unable to tell students precisely what credit they can expect to get from universities should they decide to transfer. It was also observed that the universities have varied in their approach to transfer over time, depending upon enrolment demand, so that equally qualified college students may be treated differently with respect to admissions and credit transfer in different years. It was believed that there should be more explicit rules that are both more 'reasonable' (using the candidate's ability to succeed as a measure of reasonableness) and more generous (in terms of the granting of credit for academic work done in colleges). The fact that universities' retention rates and graduation rates have fluctuated and have not always been particularly high was suggested as evidence of the need for further examination of their current admission policies.

It was recognized that the CAATs had some way to go in their treatment of transfer students from other colleges and within the same college across areas, as well as in their treatment of students transferring from universities who are still required to take the core curriculum.

Some concern was expressed over the curriculum implications of extending transfer arrangements. It was felt that such developments must not be allowed to direct college programming, and that the colleges must remain true to their original mandate. One participant expressed the view that some curriculum 'synergy' should occur to the mutual benefit of both types of institution.

Some participants felt, however, that increased transfer would not occur until the universities went through a period of declining enrolment and were forced to look beyond their traditional sources for new students. The potential loss of resources to the universities for accepting credits earned by students in college, especially in the context of less than full capacity enrolment, would be a stumbling block even under conditions of declining enrolment. A proposed arrangement between a university and a college, where the college would pay the university $360 in order to make up the tuition losses to the university if it were to accept a course delivered by the college as a university level equivalent for transfer purposes was cited as an example of what might be expected. The fact that some universities are now approaching colleges about transfer arrangements suggested to at least one participant that the universities are entering a period of (projected) declining enrolment. The general discontent with higher education on the part of governments and business was cited by one participant as another potential prod for greater cooperation on the part of the universities on this issue.

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[1] Michael Skolnik, "How Ontario's College System Might Respond to Pressures for the Provision of More Advanced Training." Colleges and the Education Spectrum — Colleges and Universities, Toronto: Ontario Council of Regents, 1989.

Reaction of Participants to Issues and Problems which Others have Identified.

(i) The Career 'Dead-Ending' of CAAT Graduates

Career dead-ending of college graduates was thought to apply more to one and two year program graduates than to three year program graduates. 'Credentialism' was felt to be more of an issue with large corporations than with smaller firms. The problems that the CAATs face in this respect, is that students tend to be more aware of the credentials demanded by large firms than by those expected by smaller firms.

(ii) The 'Polytechnic' Issue — Competing with Other Countries which have Well-Developed Advanced Technical or Polytechnic Programs.

Several participants contended that what the colleges are doing approaches the frontiers of what is needed in advanced training, although a gap was thought to exist in applied research and technology diffusion. It was agreed that there is a need for more advanced training and technological training, but it was felt that this is essentially an issue of the quantity and not the quality of what is currently provided. It was not clear to the participants that there was a need for another level of education or how exactly that other level (i.e., 'polytechnic' education) might be defined. The fact that demand for graduates in technology far outstripped supply suggested to participants that employers found the quality of such graduates to be adequate.

Enabling Models for Degree-Completion and 'Polytechnic' Studies

(i) Provincial Institute on Academic Awards for Combined College-University Studies

The participants were very enthusiastic towards the Provincial Institute concept developed as option VI in Skolnik's paper. In particular, they thought that circumventing the bilateral model of articulation agreements would streamline the paperwork and 'administrative nonsense' associated with negotiating transfer arrangements with individual universities. They also found the low cost of the institution very appealing, but emphasized that it should remain a counselling and credentializing body and should not engage in teaching in order to ensure that it maintain low operating costs. One participant commented on how this model (or any model of degree completion) would also help to attract more international students into the college system. The value of such degrees in the eyes of employers and students was noted as a potential problem for the provincial institute, and it was felt that very meticulous quality control would be required from the outset.

Summary and Conclusions

This meeting focused more on the existing problems with transfer arrangements and other forms of cooperation between the universities and colleges than with alternatives to the existing arrangements. The major problem that the participants identified in this area is the lack of consistency in the treatment of college graduates by different universities at different points in time. This inconsistency results in unnecessary administrative bottlenecks and inefficiencies. This group was amenable to just about any alternative arrangements that would relieve these bottlenecks, and expressed special interest in the provincial institute as an alternative model.

Meeting with OCUFA Executive

Participants

Bill Graham, President

Marion Perrin, Executive Director

Heather Webster, Vision 2000 Coordinator

Facilitator

Michael Skolnik

Council of Regents Staff

Brian Wolfe, Vision 2000, Study Team 5

Rapporteur

Craig McFadyen

Identification by Participants of Issues and Problems Relating to College-University Relationships

This group felt that funding problems strained relations between the colleges and universities. In particular problems are the lack of coordination between federal and provincial governments on educational matters, and the mixed signals being sent by Ottawa on issues relating to education and training. It was felt that the university sector's position was that funding has to provided before any new initiatives could be undertaken and questions of educational quality could be addressed.

The OCUFA executive also felt that the mandate of the college system with respect to its positioning in the educational spectrum had to be clarified before linkages could be extended with the universities. They said that the strength of the college system is that it provides a vehicle for people who might otherwise not have had the opportunity to receive post-secondary education. The participants stressed that they would not want to see the vocational orientation of the colleges change.

The group cited several examples of individual articulation agreements that they felt were successful, but were not certain that a great deal more really had to be done in this area. Citing the California system, where the colleges act as feeders to the university system and articulation is system-wide, it was observed that the trend in that system has been away from academic transfer to more technical and vocational training. Where transfer still occurs it is more likely to be 'occupational transfer' than 'academic transfer.' The conclusion drawn from this was that if there is going to be an extension of transfer arrangements between the colleges and universities, it would not likely be system-wide and would probably be program specific in occupational programs. It was suggested that a useful function that Vision 2000 could serve would be in the identification of specific programs where there would appear to be a need for more cooperation between institutions.

Formal co-operative programs sharing the resources of the colleges and the universities were mentioned as one way greater cooperation might be achieved, but these arrangements would have to be worked out on a voluntary basis. The universities would be concerned about the impact of such cooperation on their budgets and autonomy. Further, the participants observed that the universities would be concerned about having to compete with other degree granting institutions.

It was also noted that transfer arrangements between and within universities in Ontario had to be improved, and that the experience in trying to improve inter-university relations in this regard may well be indicative of the problems the colleges are likely to face. It was thought that some form of financial incentive would be the most effective way to get university cooperation with articulation agreements. The fact that the history of the development of the universities in Ontario has shown that more technical and career oriented programs and faculties have grown out of rather 'stodgy' academic institutions was held out as encouragement for the parallel prospect of expanding transfer between the universities and colleges. In addition, it was mentioned that these sorts of developments would be beneficial to the economy of Ontario and could be presented as such to the Premier's Council and the Ministry of Treasury and Economics. It was thought, however, that unless there is greater planning with respect to industrial strategy, there is little that can be done in terms of codifying linkages other than incremental developments with specific programs and articulation agreements.

Reaction of Participants to Issues and Problems which Others have Identified.

(i) The Career 'Dead-Ending' of CAAT Graduates

The career dead-ending of college graduates that have the same qualifications as university graduates (nursing was used as an example) was deemed to be intolerable.

(ii) The 'Polytechnic' Issue – Competing with Other Countries which have Well-Developed Advanced Technical or Polytechnic Programs.

Given the preferences and emphasis of industry and government in Ontario, the question of declining enrolments in technology was broached. The OCUFA representatives felt that the problem in this area that both sets of institutions were facing was cultural and, perhaps, cyclical, and could be addressed in part through better marketing. They reiterated that this was an area of potential cooperation provided the colleges recognize that their primary role is the delivery of technical and career oriented studies.

Enabling Models for Degree-Completion and 'Polytechnic' Studies

(i) Provincial Institute on Academic Awards for Combined College-University Studies

The participants pointed out two potential problems with the provincial institute as a model for degree completion. First they questioned whether or not employers and students would consider the degrees from the institute as credible and, therefore, desirable. If not, they said, the institute would never get off the ground. The second problem would be the reaction of the universities. If the universities are to be responsible for the delivery of courses, and if they are not enamored with the institute, they can easily obstruct the objectives of the institute.

Summary and Conclusions

This group was intent on maintaining the distinctness of institutional types. They thought that the primary role of the colleges was to provide occupational and career oriented training, while the universities were primarily academic institutions with a smaller, albeit a growing, core of occupationally oriented programs. The OCUFA executive stressed, however, that this did not preclude the possibility of closer and expanded linkages between the two types of institution, especially in the fields of technology and engineering. They felt that because it is not a priority for the universities to provide better transfer arrangements for college graduates, the best way to encourage the cooperation of the university sector in this regard was through the extension of special financial incentives. Their sense was that even though

the existing bilateral model of negotiating transfer arrangements has been slow and cumbersome, it is probably the only one that the universities will agree to. The creation of new bodies would only serve to further confuse the picture of post-secondary education in Ontario.

Meeting with COP Task Force on College and University Relations

Participants

Ron Chopowick, ACAATO

Brian Desbiens, Sir Sandford Fleming College (Task Force Chair)

Nadine Koch, Sault College

Doug Light, George Brown College

Margaret McGee, Algonquin College

Tina Sartoretto, Cambrian College

Facilitator

Michael Skolnik

Council of Regents Staff

Starr Olsen, Executive Officer, Study Team 5

Rapporteur

Craig McFadyen

Identification by Participants of Issues and Problems Relating to College-University Relationships

The group began by attempting to determine the magnitude of graduate movement from colleges to universities, and expressed doubts that it was currently a very important phenomenon. It was conceded, however, that the absolute numbers of transfer students may be relatively low at present because the barriers are so high. Citing Peter Stokes' paper[2], it was pointed out that the movement of university graduates into college programs was greater than that of college graduates into university programs. This was thought to be evidence that the college sector had shown more flexibility in this respect than the universities.

It was also noted that the barriers to transfer impacted differentially on different program areas and occupational categories. For the sake of expediency, it was suggested that greater attention be directed towards the urgent need for transfer arrangements in specific program areas.

The lack of standardized treatment across universities and discipline areas was also criticized. On the one hand, some programs in some universities accept general arts and sciences (GAS) courses for transfer but not core courses in specific program areas (e.g., there is no transfer credit granted for basic marketing and accounting in most university business programs even though the same texts and course materials are often used). On the other hand, in other program areas (e.g., nursing) the universities accept the core courses for transfer credit but not the electives or GAS courses. It was observed with some irony that, as a result of the

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[2] Peter Stokes, "College Transfer Revisited: A Working Paper." Colleges and the Education Spectrum — Colleges and Universities, Toronto: Ontario Council of Regents, 1989.

intransigence of many Ontario universities on transfer, many of the best articulation agreements have been worked out with American universities.

It was further noted that this arbitrary treatment applied to inter-university transfer students as well as college to university transfer students. It was recommended that, if they are to be taken seriously by the universities, the colleges will have to standardize transfer arrangements amongst themselves. Indeed, more generally, it was felt that the colleges need to be more precise in defining and clarifying what it is they do in order to further the universities', as well as MCU's and employers', understanding of the system. The creation of exit standards was offered as a meaningful point of departure for this process. It was thought that this should be undertaken at a system-wide level. In order to protect college autonomy, it was recommended that this process be college-led, as opposed to being Ministry-led.

A note of caution was sounded in this discussion about the extension of articulation agreements, warning that the colleges should maintain their distinct identity and that every effort should be made to ensure that they do not evolve into a feeder system for the universities.

Reaction of Participants to Issues and Problems which Others have Identified.

(i) The Career 'Dead-Ending' of CAAT Graduates

In the mind of at least one participant the solution to the career dead-ending of college graduates is to provide appropriate post-diploma programs. To ensure that the college diploma is itself respected, it was thought that the distinctions between diplomas and certificates currently being offered by the colleges be clarified. One person suggested that the colleges should be able to grant associate and/or applied degrees. It was further pointed out that 'credentialism' in a number of occupational areas has led the universities to 'prostitute' themselves by offering degrees in any vocational area even though a degree may not be the appropriate credential.

(ii) The 'Polytechnic' Issue — Competing with Other Countries which have Well-Developed Advanced Technical or Polytechnic Programs.

The term 'polytechnic' was deemed problematic, and it was suggested that it should be dropped. It was also felt that the 'gap' identified in the Skolnik paper was hard to define precisely. Some felt that the need for 'polytechnic' education which did exist was served adequately by Ryerson, while others thought that, whether real or not, there is a perception on the part of employers and Deans of Technology that a gap exists, and that this gap is not being addressed fully by Ryerson as it continues to evolve in the direction of a university. The gap was defined by one participant as the difference between technical and technological. Employers, it was noted, require people who are both technically competent and who possess theoretical, analytical and problem solving skills; i.e., people who are 'techno-logical.'

Enabling Models for Degree-Completion and 'Polytechnic' Studies

On the question of how greater transfer might be achieved in the post-secondary education system, there was consensus that whatever type of body was introduced would need to have executive authority. For this reason the Provincial Coordinating Body was deemed to be insufficient. There was unanimous support for a Provincial Institute. It was felt that such an institute should also facilitate 'human resource development' for college staff and faculty.

Meeting with COU Committee on College-University Relations

Participants

Terry Grier, Ryerson Polytechnical Institute (Committee Chair)

Gary Locker, Lakehead University

Marion McGee, Ottawa University

Ed Monahan, COU

Laverne Smith, York University

John Vanderkamp, Guelph University

Facilitators

Penny Moss

Michael Skolnik

Council of Regents Staff

Starr Olsen, Executive Officer, Study Team 5

Brian Wolfe, Vision 2000, Study Team 5

Rapporteur

Craig McFadyen

Identification by Participants of Issues and Problems Relating to College-University Relationships

The Committee opened by questioning whether or not there was a need for the expansion of transfer arrangements. It was noted, for example, that there has been a softening in the labour market for technology and engineering degree graduates. Following from this it was deduced that the Premier's Council's emphasis on technology does not seem to parallel what is actually going on in industry.

Several successful examples of transfer arrangements were highlighted. Lakehead University's initiative in the transfer of college technology graduates into engineering programs was thought to stem in part from the University's previous experience with technology programs in its former incarnation as a Technical Institute. The success of this transfer program was attributed to the accurate identification of a 'market niche' in the fields of technology and engineering, and to designing the program to bridge knowledge gaps that may exist so that college graduates have the opportunity to succeed in engineering. Attention was also drawn to the success of York University's systematic and comprehensive transfer arrangements for college graduates. It was accepted, however, that these examples are exceptional and that most transfer arrangements are not generous enough in granting credit, they differ from one university to another, and they are not widely known about amongst college graduates or counsellors.

The group felt that there is a lot of untapped potential in the existing bilateral model of articulating transfer arrangements, and that possibilities within this model should be fully explored before looking at alternative enabling models. It was noted that the Ministry had only become explicitly interested in the transfer issue over the last two years, and that since that time considerable progress has been made in this area.

Alternative Enabling Models for Degree-Completion and 'Polytechnic' Studies

(i) Provincial Coordinating Body

The creation of a provincial coordinating body was deemed appropriate, indeed necessary, for the purposes of gathering and disseminating information about existing transfer arrangements. Moreover, it was recommended that this coordinating body act as a facilitator for the extension of transfer arrangements, and that this role might include the funding of certain pilot projects and new programs. The group warned that it would be unacceptable for this body to attempt to direct university admissions policies and felt that it should have no executive authority. It would be preferable for this body to be constituted voluntarily and to exist outside of and autonomous of government. A role for government in the workings of this body could be envisaged in monitoring the use of government funds in the creation of pilot projects.

(ii) Provincial Institute on Academic Awards for Combined College-University Studies

The participants had a number of questions concerning the constitution and operation of such an institute. It was not clear to all concerned how students of the institute would be admitted to the universities. When it was suggested that they be admitted as 'special students' (i.e., non-degree), it was noted that not all universities had such an admissions designation and that there may be a limit on the number of unclassified students universities are permitted to admit. The point was made that under the current funding mechanism it might not be worthwhile for the universities to engage in such activity. A further caveat pertained to the acceptability and marketability of the degree that the institute would offer. The degree would have to be seen as a credible 'entry level' degree. The group felt quite strongly that it should not have some anomalous designation, and that every effort would have to be made to avoid 'cluttering' the system with more kinds and levels of degrees. As a final note of caution it was pointed out that, in the process of trying to advantage students by providing them with a degree, such a scheme might end up disadvantaging the student by providing them with a credential that is not credible or that is deemed second class.

(iii) College Degree Granting

The idea of having certain programs in certain colleges designated as degree programs by some external accreditation body was also seen as problematic. Again, it was noted that the degree must be recognized as credible by employers, students and other educational institutions. If such degrees did not lead to the possibility of some form of graduate studies, college graduates would face many of the same 'dead-ending' problems as they do now without the degree designation. The group was most concerned that degree granting might have a steering effect and distort the mission of the colleges.

(iv) University of Technology

This model was not very well developed, but was assumed to incorporate something along the lines of 'polytechnic' education. It was simply noted that Ryerson's experience in this regard indicates that diploma/degree granting institutions tend to evolve along the lines of granting more degrees and fewer diplomas. If this were to happen to the colleges it would conflict with their original mandate.

Meeting with OCUA Committee on University-College Linkages

Participants

Bill Broadhurst
Frank DeMarco
Peter George, (Committee Chair)
Colin Graham
Evelyn Ham
Merri-Joy Kelner
Viv Nelles, (OCUA Chair)
Diana Royce, (OCUA Staff)

Facilitator

Michael Skolnik

Council of Regents Staff

Starr Olsen, Executive Officer, Study Team 5
Brian Wolfe, Vision 2000, Study Team 5

Rapporteur

Craig McFadyen

Summary

This consultation took the form of a short presentation by Michael Skolnik on the issues and alternatives in the area of college-university transfer. This presentation was followed by the reactions of participants to the issues. The meeting was kept brief because the Committee was in the process of considering more urgent matters. They expressed their desire to revisit these issues with Vision 2000 in the future.

The Committee agreed that transfer appears to be a fairly intractable problem, but doubted that the magnitude of the problem (in terms of absolute numbers of students effected) warranted anything more than incremental adjustments. It was thought that systemic approaches to the problem may be premature, and that it would be more appropriate to proliferate bilateral arrangements. There was some concern expressed over the steering effect that more radical changes (e.g., college degree granting, the Provincial Institute concept) might have on the future direction of the colleges. It was felt that the development of linkages and that possibilities for degree completion should not radically alter the colleges' original mandate. One participant queried whether there was a bias on the part of Vision 2000 that the mandate of the college system must change. In the context of certain college programs being certified as degree programs, the qualifications of college faculty were brought into question.

Similarly, on the issue of a 'gap' in technological education and training, the Committee questioned whether such a gap existed. One participant wondered what currently prevented the colleges from offering more advanced training. Another noted that it was in the context of a perceived need for greater competency in technology in the 1960s that four new engineering faculties were introduced into the university system. It was further observed that the universities are currently unable to find enough qualified students to fill existing programs in science and technology.

Appendix

Study Team 5 Consultations on College-University Linkages

Schedule of Consultations

September	
Monday 25	Meeting with ACAATO Metro Academic Heads 1:00 pm at Guild Inn
Wednesday 27	Meeting with OCUFA, 9:30 am at OCUFA offices, 27 Carlton, Ste. 400
October	
Thursday 5	Meeting with COP Task Force on College & University Relations; 1:30 pm at ACAATO offices, 111 Merton Street
Thursday 19	Meeting with COU Committee on University College Relationships; 12 noon, COU offices, 8th Floor Robarts Library,
Thursday 19	Meeting with OCUA Institutional Policy Committee; 2:30 pm, OCUA offices, 700 Bay St., 7th Floor